

**The ur-text of Late Medieval
and Renaissance Lullian logic.**
**Textual interrelations between the *Nove introductiones*
and two traditional pseudo-Lullian handbooks of logic:
The *Logica parva* and the *Logica brevis et nova***

Eleonora Buonocore

Yale University

elenonora.buonocore@yale.edu

The history of the *Nove introductiones* is still enveloped in mystery: the purpose of this article is to shed some light on such mystery, thus unraveling some of the threads that constitute the tradition of the Lullian schools in Italy between the later Middle Ages and the Renaissance. The production, diffusion, and fortune of the *Nove introductiones* constitute a unique case in the Lullian tradition, since this treatise is probably one of the first documents created by the Lullian schools in Catalonia-Aragon after Ramon Llull's death, and it was re-edited and republished several times in the course of the Renaissance by scholars of the caliber of Bernard of Lavinjeta and Nicholas De Pax, in a wider European context, which included Italy, Spain and France.

The only concrete evidence we have to date and place this text is its appearance in the manuscripts Florence, Riccardiana 1001 and Munich, Bayerische Staatsbibliothek, Clm. 10542. Interestingly enough, this important document of Lullian logic has been almost ignored by scholarship; at the most it has been registered in manuscript catalogues, starting with Lopez in *Archivum Francis-*

*canum*¹ and especially in two studies by Perarnau.² While the Munich manuscript presents only the text of the *Nove introductiones*, the Florentine manuscript, instead, contains two different works: the *Nove introductiones* and a corollary text, known as *Loyca magistri discipuli Raymundi Lulli*, which functions as an Ockhamizing introduction to the *Nove introductiones*.³

The most extensive study of both texts is still that of Francesco Santi,⁴ while Anthony Bonner and Charles Lohr have considered them in their broader analysis of the pseudo-Lullian logical tradition.⁵

Almost all the works produced by the Lullian schools in the 14th and 15th centuries show two interesting common characteristics: on the one hand the tendency towards a simplification and a normalization of the most “original” and controversial Lullian doctrines, and on the other hand the recourse to anonymity, used in the 14th century as a precautionary measure in many treatises of this period, both in Latin and the Catalan vernacular.⁶ The Lullian school of Valencia

¹ Athanasius Lopez, “Descriptio codicum franciscanorum Bibliothecae Riccardianae Florentinae”, *Archivum Franciscanum Historicum* 3 (1910), pp. 739-742.

² Josep Perarnau i Espelt, *Els manuscrits lul·lians medievals de la “Bayerische Staatsbibliothek” de Munic. II. Volums de textos llatins* “Studia, Textus, Subsidia” IV (Barcelona: Facultat de Teologia, 1986), pp. 135-138; and Josep Perarnau i Espelt, “Consideracions diacròniques entorn dels manuscrits lul·lians medievals de la ‘Bayerische Staatsbibliothek’ de Munic”, *ATCA* II (1983), pp. 123-169.

³ A preliminary edition of both treatises can be found in Eleonora Buonocore, *A Basic Handbook Of Lullian Logic And Its Introduction. Edition and Study of Two Unknown Logical Texts of the Medieval Lullian Tradition: The Nove et compendiose introductiones logice and the Loyca discipuli magistri Raymundi Lulli* (Unpublished Doctoral Dissertation: University of Siena, Siena, 2009), in the Llull DB <<http://orbita.bib.ub.es/llull/complet.asp?6587>>.

The present article reflects the conclusions reached in my doctoral studies on the *Nove introductiones* and it is highly indebt to chapter Three and Four of the dissertation quoted above. My deepest thanks to Prof. Michela Pereira for her constant help and support in shaping my research on pseudo-Lullian logic. I would also like to take this opportunity to thank Anthony Bonner for his encouragement in different stages of my research, and Prof. Loris Sturlese for his insightful comments during my dissertation’s defense in Arezzo, May 22nd, 2009.

⁴ Francesco Santi, “Osservazioni sul manoscritto 1001 della Riccardiana di Firenze”, *ATCA* V (1986), pp. 233-267.

⁵ See Anthony Bonner’s “Introduction” to the anastatic reprint of the Zetzner edition, in *Raimundus Lullus, Raimundus Lullus, Opera. Reprint of the Strasbourg 1651 edition* (Stuttgart-Bad Cannstatt: Frommann-Holzboog, 1996), pp. 9*-37*, and Charles Lohr’s “Introduction” to Ramon Llull, *Logica nova. Logica parva. De quinque praedicabilibus et decem praedicamentis. Liber de natura*, “Opera parva” 2 (Frankfurt, 1971-2), pp. i-iii, as well as his articles, “Ramon Llull, *Logica brevis*”, *EL* 16, (1972) pp. 1-11 and “Ramón Llull, ‘Logica brevis’”, *Franciscan Studies* 32 (1972), pp. 144-153.

⁶ The *Ars memorativa*, written in 1338 by Bernart Garí, a Valencian priest and Lullian scholar, is the only exception to this rule of anonymity and it should be studied separately within the context of pseudo-Lullian arts of memory. On this topic see Josep Tarré, “Un quadrienni de producció lul·lística a València (1335-1338)”, *SMR* 6 (1951), pp. 22-30, which provides a clear analysis of the mentioned work.

was from the beginning linked to Franciscan Spirituals circles, and this connection, together with the tendency to normalize Lullian doctrines, continued during the whole 14th century and was exported even outside of the kingdom of Catalonia-Aragon.

Perarnau in his “Consideracions diacròniques entorn dels manuscrits lul·lians” traces a line connecting Catalan Lullism with the Lullian schools developing in other regions of the Empire (mainly Italy and Germany).⁷ In his analysis he uses the content of the mss. Riccardiana 1001 and Clm. 10542 to show how not only there was a Lullian school in Italy, but also that it was active and that it produced new texts. Perarnau underlines a textual connection between the *Loyca discipuli* of Riccardiana 1001 and the *Nove introductiones* of Clm. 10542, almost advocating an identity between the two texts. He points out that the latter text is of Italian origin, and that the author is clearly not a Catalan, but probably an Italian Lullian scholar, who knew even the later Lullian production, since the text mentions the authentic Lullian *Liber de possibili et impossibili* (Paris, 1310).⁸ Unfortunately, due to the textual continuity between the two works in Riccardiana 1001, Perarnau was not able to recognize the fact that the *Loyca discipuli* is an independent text, added at a later time as an introduction to the *Nove introductiones*, probably with the intention of modernizing the terminology of the earlier logical text.

Nevertheless, Perarnau’s conclusions are still valid even if they apply only to that part of Riccardiana 1001 that contains the *Nove introductiones*. In fact, the final section of the *Nove introductiones* does refer to an Italian, more specifically Genoese, background, but without giving many more details about its author or the provenance of the text. Thus, it is hard to determine if there could be any relationship between the primary center of diffusion of Lullism instituted by Llull himself in Genoa, in the house of Perceval Spinola, and the production of the *Nove introductiones*.

The main aim of the present article is thus to clarify the role of the *Nove introductiones* in the context of the first century of Italian Lullism. To this end, I will analyze the text of the *Nove introductiones*, probably written around 1330, and point out the different logical traditions that contributed to the composition of this eminently school-oriented text. Subsequently, I will consider how the text of the *Nove introductiones* influenced the field of Lullian logic, looking at its correlations to two later pseudo-Lullian logical texts, the *Logica parva* and the *Logica brevis et nova*.

⁷ Perarnau, “Consideracions diacròniques”, pp. 123-169.

⁸ Ramon Llull, *Liber de possibili et impossibili*, ROL VI, pp. 384-466.

The *Logica parva*, also known as *Dialecticae introductiones*, was published in Alcalà in 1512 by the famous Lullian scholar Nicholas de Pax, who, according to the best humanistic tradition, claimed to have “discovered” its manuscript in a “dusty library”, and, therefore, upheld its Lullian paternity. In 1971-2 Lohr published an anastatic reprint of the *Logica nova* and *Logicalia parva*. The edition included the text I am calling *Logica parva*, a pseudo-Lullian logical treatise, which combines typical Lullian features with the most standard scholastic logical doctrines. This text was also the subject of Àngel d’Ors’ study in 1996, which started an ongoing academic debate over its status in the Lullian tradition.⁹ On the other hand, the *Logica brevis et nova*, also known as *Logica abbreviata*,¹⁰ is a brief introduction to Lullian logic, which was published for the first time in Venice by the printer Filippo di Pietro in 1480. The *Logica brevis et nova* has a peculiar history and enjoyed a much wider diffusion than the two other texts since it was included in the great anthology of Lullian and pseudo-Lullian works edited by Lazarus Zetzner in Strasbourg in 1598, which was reprinted three times during the 17th century.¹¹

The *Nove introductiones*, as will be shown in the following pages, has strong textual ties both with the pseudo-Lullian *Logica parva*, subject of Lohr’s and d’Ors’ studies, and with the *Logica brevis et nova*, studied by both Bonner and Lohr, which was then to become a part of the huge Lullian synthesis and encyclopedia of knowledge found in Bernard of Lavinheta’s *Explanatio compendiosaque applicatio artis Raymundi Lulli* of 1523.¹² I believe that the *Nove introductiones* can be identified as the text that underlies the composition of both the *Logica parva* and the *Logica brevis et nova*, which in turn constitute a sort of shortened and updated version of the earlier handbook for Lullian logic.

While conclusive evidence on the relationship between these texts cannot be drawn till there is a critical edition for both the *Logica parva* and the *Logica brevis et nova*, I do propose that the very provisory nature of the *Nove introductiones*, as a sort of ur-text for Lullian logic, clarifies an important issue: this is

⁹ Charles Lohr’s “Einführung” to Lull, *Logica nova. Logicalia parva*, pp. i-iii. Àngel d’Ors, “Raimundo Lulio, Nicolas de Paz y la Logica parva”, *Documenti e Studi* 7 (1996), pp. 115-130.

¹⁰ The Lull DB has only one entry for the *Logica brevis et nova*, and puts the title *Logica abbreviata* as an alternative title for the same text. I have consulted the text of the *Logica abbreviata* available at the Biblioteca Universitaria in Bologna and confirm that it is simply another title for the text of the *Logica brevis et nova*.

¹¹ Anthony Bonner’s “Introduction” to the anastatic reprint of the Strasbourg 1651 edition, published in 1996, still provides one of the best analysis of the complexity of the textual tradition of pseudo-Lullian logical texts, Lullus, *Raimundus Lullus Opera*, pp. 9*-37*.

¹² Bernardus de Lavinheta, *Explanatio compendiosaque applicatio Artis Raymundi Lulli*, ed. and intr. Erhard-Wolfram Platzbeck (Hildesheim: Gerstenberg, 1977).

mainly a school text, a work in progress, intended to be adjusted to the needs of the teacher and of the students, and to the beliefs of the time. This clearly fits the status of logic as a discipline. Therefore, I will consider the text as such: a handbook of logic for Franciscan schools.

I. The *Nove introductiones* between Lullian and Scholastic Logic

The *Nove introductiones* is a rich and puzzling text, which poses many questions to the scholar. The first one is about its dating and provenance. When was it written? And where does it come from? Another fundamental question that needs to be addressed is that of the purpose of this text, which seems to come from the tradition of the Franciscan *studia* and reveals a didactic and normalizing intent.

The last section of the *Nove introductiones* is of particular interest for scholarship because it contains a few indications that can help give a date and a location for this text, besides offering a few hints about the identity of its author. In fact, the text states, talking about Ramon Llull: “quem etiam in partibus nostris aliqui magnum philosophum catalanum appellant”. This phrase clearly indicates that the author of the *Nove introductiones* is not Catalan (and obviously not Ramon Llull himself), and therefore does not belong to the Lullian schools of Valencia or Barcelona, since he feels the need to specify, that even where he comes from (“in partibus nostris”), Llull is known as a great Catalan philosopher. But where does the author of the *Nove introductiones* come from? Probably he was from Genoa, Italy, as later in this section he declares:

Tanta enim sapientie virtus in ipsa arte consistit, quod supra quamcumque aliam hucusque inventam presertim elevat intellectum, de cuius virtute per Dei gratiam *in partibus Ytalicis*, ut in nobili civitate *Ianuensi* aliisque quibusdam, minimella fuit aliquibus notitia propalata.¹³

Even if he does not explicitly declare to be an Italian from Genoa, the fact that he mentions “partibus Ytalicis” and then specifies the city of Genoa seems to point in the direction of an Italian, Genoese origin of this text. Francesco Santi¹⁴ and Josep Perarnau¹⁵ had already pointed out the very probably Italian origin of this text, which emerges also from the language and the examples used

¹³ Edition offered in Buonocore, *A Basic Handbook* (cited *supra*, n. 3), p. 316.

¹⁴ Perarnau, “Consideracions diacròniques”, pp. 152-4.

¹⁵ Santi, “Osservazioni sul manoscritto 1001”, pp. 233-267.

by the author, since whenever it does not report a traditional example for a topic, he tends to use Italian places, as we can see: “ut ianuenses contra pisanos pugnare malum est, ergo venetos contra napoletanos pugnare malum est”.¹⁶

The ms. Riccardiana 1001 helps in reconstructing the history of this text, since another piece of evidence in favor of an Italian origin of this text comes from the colophon of the manuscript. It presents some marginal notes from its copyist, a Prussian Hermit friar, probably called Nicholas Mukkenwalt, stating that he had compiled the manuscript while in the monastery at the Cervara, in 1417, during the time that a certain dominus Bertamus was underprior. At *folio* 361v, the copyist declares, with a closing note, his name, Nicolai Mukklenwalt, his provenance, Prussia, and the addressees of his work, “ad fratrum heremitarum sancti augustini donatum”, also specifying the monastery “Ieronimi in monasterio suo proprio Sancte Iustine ... Vicem gerens dominus Bertramus royles...”. Also on f. 166v there is a note reporting his name and the date in which that section of the manuscript was concluded: “Per manus fratris Nicolai Muckenwalt de Prussia ordinis sancti Augustini, ab incarnatione domini M^oCCCCXVII^o, XX die mensis aprilis in monasterio Sancti Ieronimi de Cervaria...”.

Therefore, we learn that Riccardiana 1001 was written in and for the monastery of Benedictines friars at San Geronimo della Cervara, which formed a part of the dioceses of Chiavari, and which would later, in 1461, become part of the famous congregation of Santa Giustina.¹⁷ The prior there was Bertramo de' Correnti, who is recorded in the *Annali di Santa Margherita Ligure*¹⁸ as a very active figure, under-prior in 1414, prior from 1419 to 1425, and who clearly is the same *dominus Bertramus* named in our manuscript. In the same period, we find numerous members of the Spinola family involved in the direction of the monastery at the Cervara, thus making it very easy to draw a connecting line between the supposed Genoese center of Lullian studies that was to be built around the library of Perceval Spinola and this Ligurian monastery. It is fascinating to note, that the monastery of San Geronimo della Cervara, in the dioceses of Santa Margherita Ligure, was created with the support of members of the Spinola family, who were often a position of power in the region, and that this is

¹⁶ Edition offered in Buonocore, *A Basic Handbook*, p. 286.

¹⁷ Pistarino Geo, *Italia Benedettina II- Liguria Monastica* (Cesena, Badia di Santa Maria del Monte: Pubblicazioni del Centro Storico Benedettino Italiano, 1979), pp. 89-91. G. Cantoni Alzati, *La Biblioteca di S. Giustina di Padova: libri e cultura presso i benedettini padovani in età umanistica* (Padova: Antenor, 1982).

¹⁸ Attilio Regolo Scarsella, *Annali di Santa Margherita Ligure* (Bologna: Forni ed., 1914), pp. 47-49.

the same family of that Perceval Spinola to whom Llull's will had destined a significant portion of his manuscripts. Unfortunately, I could not find any closer link between the two than the specific evidence in Riccardiana 1001.

The presence of the text of the *Nove introductiones* in Clm. 10542 and Riccardiana 1001 constitutes one of the few indication of the existence and survival of a Lullian school in Italy during the period between the death of Llull and the rebirth of an Italian Lullian tradition, due to the emigration of Catalan Lullian scholars like Joan Bolons and Pere Dagui in the 15th century.¹⁹ In particular, the composition of Riccardiana 1001, which combines the *Nove introductiones* with its "Ockhamizing" introduction, the *Loyca discipuli*, and which clearly belonged to an Italian intellectual environment, seems to strengthen the evidence in favor of an Italian origin of the *Nove introductiones*.

From a philosophical and logical point of view, the text of *Nove introductiones* appears to be still very influenced by the traditional *Summule logicales* of Peter of Spain as well as by Ramon Llull's *Logica nova*, even if, as it will be pointed out in the analysis of the text, in a few passages we can already detect the penetration of Ockhamistic ideas and distinctions. To try to disentangle the mix of philosophical threads present in the text, I will provide a detailed analysis of the text of the *Nove introductiones*, which will be carried out starting from the *incipit*, the doctrines professed, and then considering its structure and how it has changed in the different redactions of it that we can find, under different titles, throughout the history of pseudo-Lullian logic.

a. The Beginning of the Text: Incipit, and Definition of the Object and Principles of Logic

The text of the *Nove introductiones* begins with an invocation to God's goodness and truth that clearly marks it as belonging to the Lullian tradition. From the very beginning the author calls upon two of the Lullian *dignitates* (or God's attributes) as the principles from which he draws in his introductory exposition of the logical doctrine necessary to become a good Lullian scholar. The Munich manuscript adds a short invocation and title to the text, which is absent in the version offered by ms. Riccardiana 1001: "In nomine bonitatis optime veritatis quam verissime Incipiunt Nove et compendiose introductiones logice".²⁰ The

¹⁹ Marta M. M. Romano, "I Canti di Bartolomeo Gentile da Fallamonica (1450-1510/20). Poesia, scienza e studio di Lullo", *Pan* 24 (2008), pp. 273-299. Romano describes these few documents as "punti di luce" in a dark period, p. 279.

²⁰ Clm. 10542, f. 42r.

very title of the *Nove introductiones* qualifies this text as a school-text, an introduction to logic, to be more specific a new, short, summarized (and normalized) introduction to logic: namely a new, revised handbook for Lullian logic.²¹

The need for a new and shortened, abbreviated, version of a longer work is a constant in all the Lullian tradition, starting with Llull's *Ars brevis*, to Le Myésier's *Breviculum* (and the *Summula sive introductio in logicalibus*). Alongside the need for brevity, we find in the *Nove introductiones* also a clear "normalizing" intent: one of the purposes of this text is that of making Lullian logic more "palatable" to a scholastic audience and easier to understand for beginning scholars. A clear aim of the text seems to be that to reconcile Llull's logic with that of Peter of Spain. Such a "normalizing" intent is typical of the beginning of the Lullian tradition and will continue to characterize Lullian scholarship throughout the centuries, culminating with the work of Bernard of Lavinheta.

Before further investigating the possible origins and time of composition of this work, I would like to give a very close look at its structure and contents. The *Nove introductiones* has been almost completely neglected by scholarship (more attracted to the less traditionally Lullian *Loyca discipuli*).

The actual incipit of the *Nove introductiones* brings the reader in *medias res*. There is no introduction and the text starts with a definition of logic. "Logica est ars et scientia cum qua verum et falsum ratiocinando cognoscuntur et unum ab altero discernuntur verum eligendo et falsum dimittendo".²² This definition of logic seems to be an attempt to mediate between the typical Lullian definition of logic and the traditional scholastic definitions of logic, from Peter of Spain onward.

Here the attention to the use of terms reveals a precise terminological awareness. The word *Ars* refers to the Lullian Art but also to the technical aspects of logical reasoning, while the term *scientia* acknowledges the status of logic as a well-established discipline within the scholastic curriculum. The Lullian artist who also considered himself a scholar had to receive a basic training in logic in order to be able to dispute at the same level with the master logicians coming out of the faculties of Art in the universities of the time, which mainly offered instruction in Aristotelian logic. Llull himself had stressed the importance of logical training and had proposed ways to deepen and at the same time simplify

²¹ I have adopted the title *Nove et compendiose introductiones* as it is the one that graphically appears in the manuscript. I have kept the medieval spelling *Nove*, instead of normalizing the title as it appears in the Llull DB, which reports *Novae et compendiosae introductiones logicae*. For the idea of a "normalization" of Lullian doctrines inside the context of the early Lullian schools see also Buonocore, *A Basic Handbook*, pp. 67-102.

²² Edition offered in Buonocore, *A Basic Handbook*, p. 225.

the study of logic through the use of his art. It is actually probable that this definition came directly from Llull's *Introductoria artis demonstrativae*, in which the *doctor illuminatus* had clearly said "Logica enim dicitur Scientia, et dicitur Ars".²³

The *Nove introductiones* defines the object of logic as the ability to discern truth from falsehood by means of reason, thus allowing the scholar to choose truth and dismiss falsity. Surprisingly, Peter of Spain's *Tractatus* does not provide a definition for logic, and the word *logica* appears seldom during the course of the whole treatise. Peter prefers to refer to the art of logic as *dialectica* and defines it in the opening lines of the *Tractatus* as "Dialectica est ars ad omnium methodorum principia viam habens. Et ideo in acquisitione scientiarum dialectica debet esse prior".²⁴

In this passage, according to Peter, the study of dialectics needs to be antecedent to the pursuit of any other knowledge, because dialectics is seen as an art, which offers a way to arrive to the principles of every other method. The unknown Lullist author of the *Nove introductiones* seems to have assimilated the lesson of the *Tractatus*, since he continues his introduction remarking the place of logic as a part of the philosophical sciences and stressing the need to consider logic as a particular science with its own specific principles: "Sed quoniam logica est philosophie membrum ob hoc est particularis scientia particularia habens principia que subiciuntur alicui utilitati secundum quod ratio et natura hoc insinuant".²⁵

Moreover, the principles of logic need to be clarified before proceeding with the explanation of the logical doctrines. At this point the author introduces the concept of universals, which should be learned in order to prepare for the study of logic, together with the distinction between the ten transcendent principles and the nine relative principles (*decem transcendentia et novem instrumentalia principia*). It is interesting to note that here the *dignitates* (the principles) of the Lullian Art are considered as the principles that underlie logic and whose knowledge needs to be mastered before moving on with the acquisition of the strictly logical mechanisms. In addition the author divides the whole logical discipline in three discrete sections which he will analyze and that together provide the student with a sure way to truth: "certa veritas atque certitudo vera pan-

²³ Ramon Llull, *Introductoria artis demonstrativae*, *MOG* III, p. 2 (56).

²⁴ Peter of Spain, *Tractatus. Called Afterwards Summule logicales*, ed. L. M. De Rijk (Assen: Van Gorcum, 1972), p. 1; Peter of Spain, *Trattato di Logica. Summule Logicales*, ed. and transl. A. Ponzio (Milano: Bompiani, 2004), pp. 2-3.

²⁵ Edition offered in Buonocore, *A Basic Handbook*, p. 225.

detur illis". The three sections are the ten transcendentals, the nine instrumental principles and the ten questions. Our author then incidentally remarks that the ten transcendent principles constitute the first universal "que sunt primum universale". The *Nove introductiones*, however, does not linger on any further explanation of why the ten principles are the first universal, but delves right away into a detailed list of each of them.

The ten transcendent principles briefly described are: *ens*, being; *bonum*, good; *magnum*, great; *durans*, lasting; *potens*, mighty; *intelligibile*, understandable; *amabile*, lovable; *virtuosum*, virtuous; *verum*, true; and *delectabile*, likable. These principles are posed as the most universal and general, and they can subsume the whole of reality, both spatially and temporally, as they include everything past, present and future. Following closely Llull's teachings in the *Liber de venatione substantiae accidentis et compositi*,²⁶ the text proceeds to show how the ten principles can be applied to each other to form other universal and true sentences, showing how the principles are not only equivalent but interchangeable among themselves. From a contemporary perspective, this might seem tautological, but it represents only the first part of the logical system proposed by the *Nove introductiones*. It is interesting to note that the *Nove introductiones* also presents some terminological innovations and probably "confusions" with respect to the authentic Lullian logical tradition. The principles of the Art are called normally *principia*, but are also referred to once as *dignitates*.²⁷ Moreover, the use of the term *universalis* and the definition of some principles as *transcendens* are quite striking.²⁸

The second universal is necessary to break the chain of analogies between the ten transcendent principles and bring change and difference into this system. The second set of principles, nine, here called instrumental principles, are a key element for the logician, as they allow the construction of arguments. In this section our author is following very closely Llull's logical writings in the third period, since the nine principles can be inscribed in three triangles: *concordantia-differentia-contrarietas*; *principium-medium-finis*; and *maioritas-equalitas*

²⁶ Ramon Llull, *Liber de venatione substantiae, accidentis et compositi*, ROL XXII, pp. 16-18.

²⁷ On the use of *dignitates* and *absolute principles*, see Anthony Bonner, *The Art and Logic of Ramon Llull. A User's Guide*, Studien und Texte zur Geistesgeschichte des Mittelalters 95 (Leiden - Boston: Brill, 2007), pp. 125-134.

²⁸ A detailed analysis of the whole terminology applied here would require a much more in depth study of this text, which is now possible thanks to the edition of the text offered in the Llull DB. It is interesting to note, however, that the four transcendental terms become here ten: such a shift, unprecedented in Lullian logic is probably caused by the author's confusion between transcendental terms and Aristotelian categories.

–*minoritas*. Through this triangular structure the logician can understand, using his natural reason, how transcendence operates in reality and how accidents separate themselves from the universals and come to life.

The conditions of the nine principles, which in Llull's logic formed the basis for the understanding of the whole structure of reality, here are reduced to a mere formality, to a logical structure whose main area of application is discourse. From the very beginning of the text the Lullian Art is used and presented as a logic, or more precisely, a theory of demonstration, and its main aim is to distinguish true and false reasoning: "Tam vera et necessaria atque infallibilia sunt principia supradicta, que sunt instrumentalia vocata, quod vigore ipsorum potest logicus solvere sophismata, insolubilia, paralogramos et alia similia".²⁹

Continuing with this emphasis on logic as an art to create arguments, the text introduces the third universal, which is constituted by the ten rules, or questions. It is through some of these rules that the schoolmaster is able to re-introduce a certain degree of realism in this logical system. The questions consider the total spectrum of reality: possibility, entity, materiality, formality, quantity, quality, time, space, modality and the so-called "instrumentality", which concerns the instruments through which things can exist and act. Such rules can be applied both to concepts and to things; namely to second and first intentions. Therefore the task of the true logician is to find harmony between things and concepts: "Et ideo logicus debet concordare intentiones secundas cum primis, sequendo condiciones primarum in secundis".³⁰

Here our author seems to be dependent on an earlier authentic Lullian source (from the quaternary period), the *Ars demonstrativa* and its commentary, the *Introductoria artis demonstrativae*, which describes in details the difference between first and second intention.³¹ The *Nove introductiones*, though, does not follow closely the authentic text; rather it shortens and simplifies the Lullian doctrines. The definition of the logician's role as "he who should put into accord the second with the first intentions" stems directly from a definition of logic as a science that deals with more than just second intentions, concepts, but that is concerned "de secundi intentionibus iunctis primis", about the union between concepts and things. Since this union has to take into account at first the conditions of existence for the things discussed, one cannot deny that there is a degree of realism that informs the rhetorical strategies which will be explained later on.

²⁹ Edition offered in Buonocore, *A Basic Handbook*, p. 229.

³⁰ Edition offered in Buonocore, *A Basic Handbook*, p. 232.

³¹ On the use of first and second intentions in Llull's logic and in particular in the *Ars demonstrativa*, see Bonner, *The art and logic of Ramon Llull*, pp. 72-73.

The anonymous schoolmaster continues stating that in this *opusculum* he will proceed mainly according to the rule of entity (*quidditate*) and instrumentality (*instrumentale*): his aim is to provide the reader with a way to achieve correct definitions and to reach clarity. Once again, the stress is placed on the need for brevity: this is a typical sign of the school tradition. Moreover, when he says “breviter intendendo prosequi auxilio et specie bonitatis optime veritatis”,³² using God’s attributes in a typically Lullian way, it reminds one especially of texts coming out of the Lullian school in Valencia.³³

The entire section on the ten rules seems to be dependent on another authentic Lullian source: it follows almost *verbatim*, though sometimes shortening parts of it, the chapter “*De secunda parte, quae est de regulis*” of the *Liber de venatione substantiae, accidentis et compositi*, written by Llull in Montpellier in 1308.³⁴

Moreover, the next introductory section, which describes the way in which the text will proceed, is also inspired by the *Liber de venatione*: it integrates and summarizes the core ideas of the book. It also speculates more on the content of the two opening paragraphs found at the beginning of the second and third distinctions of the book, which deal with the searching for substance, accident and quantity through principles: “*De venatione substantiae et accidentis per principia*”, and “*De venatione quantitatis per principia*”.³⁵ The author of the *Nove introductiones*, though, only provides his readers with the five specific principles for logic, which he identifies as: the term, the proposition, the probabilities, the categories and the argument.

1) The term

The treatment of the term is carried out in a manner that merges a more clearly scholastic and Aristotelian topic with a structure which can definitely be identified as Lullian. The definition of term is given under the heading *terminus quid*; then the text presents the *terminus differentia*, which contains the explanation of the difference between a *cathegorematicus* term, or bearing meaning in itself, and a *syncathegorematicus* one, namely one whose main purpose is to modify the meaning of another term. There follows a discussion on all the various aspects of the term, which resembles the way in which a Lullian wheel

³² Edition offered in Buonocore, *A Basic Handbook*, p. 233.

³³ Tarré, “Un quadrienniu de producció lul·lística” (cited *supra*, n. 6), pp. 22-30.

³⁴ Ramon Llull, *Liber de venatione substantiae*, pp. 18-21.

³⁵ Ramon Llull, *Liber de venatione substantiae*, pp. 21-31.

could be “evacuated”. Here the author is combining two principles: the special logical principle, the “term”, with the nine instrumental principles illustrated before.

The Lullian influences in this passage emerge also from the use of clearly Lullian terminology in the examples offered to clarify positions and functions of the various speech parts, such as: “*exemplum quod sit subiectum vel predicatum dicendo sic ‘bonitas est magnitudo’ in hac propositione, bonitas est subiectum et magnitudo predicatum*”.³⁶ The treatment of the term in itself and its division though, resembles closely that of Peter of Spain in the *Summule logicales*, without being a *verbatim* quote from it.³⁷

A first glance analysis immediately shows that the text is a compilation of different sources. The author of the *Nove introductiones* creates his own original text, based on the merging of two logical traditions, the Lullian and the Aristotelian. He picks and chooses what to insert and how to exemplify each concept, according to which formulation seemed the most efficient to him. The *Nove introductiones* is mainly a textbook, a tool for teaching, and the didactic purpose of the text influences the way each topic is treated. The original Lullian structures are preserved only when they represent efficient mnemonic tools, like the division of the treatment of terms according to each instrumental principle; or when they offer a clearer system of exemplification, as with all the examples that use Lullian *dignitates*, namely the absolute principles intended as God’s attributes. In doing so, the text successfully carried out a strategy for the “normalization” of Lullian logic: the elements preserved are only those that could facilitate learning (and not those that might prove disturbing to the reader).

In addition, when the scholastic tradition offered a stronger tool for teaching, the author always adds it to his treatment of the subject, thus creating a real blend of Lullian and scholastic elements: this emerges clearly in the exposition of the second principle of logic, the proposition.

II) The proposition

In the treatment of the proposition, the *Nove introductiones* does not follow precisely the structure of the *Summule logicales*: the very definition of proposition seems to derive directly both from Boethius’ *De differentiis topicis*, and from Lull’s *Logica nova*, as we can see.

³⁶ Edition offered in Buonocore, *A Basic Handbook*, pp. 262-265.

³⁷ Peter of Spain, *Tractatus*, p. 43; Peter of Spain, *Trattato di Logica*, pp. 96-97.

<u>Boethius De differentiis topicis (Pat. Lat. 64)</u>	<u>Raymundus Lullus, Logica nova (ROL XXIII)</u>	<u>Nove introductiones</u>
“Propositio est oratio uerum falsumque significans”. ³⁸	“Propositio est materia syllogismi, de pluribus veris dictionibus constituta”. ³⁹	“Propositio est oratio de pluribus veris dictionibus constituta, veritatem vel falsitatem significans”. ⁴⁰

Thus, this definition integrates the one given by Llull in the *Logica nova*, which basically reduces the proposition to a part of the syllogistic structure, with the attention to truth/falsehood and to signification typical of the scholastic tradition found in the *Summule*.

Moreover, in the section on the categoric and hypothetic proposition, the text inserts parts that are completely different from Peter’s *Summule*, and for which I was not able to find an immediate referent in any authentic Lullian text: therefore here our schoolmaster is either using some (as yet) unknown source, or being completely original, or more probably blending his sources so well that it becomes impossible to trace the originals. It is this aspect of mixture of texts, of a blend of traditions, that makes the *Nove introductiones* so interesting, as it allows the modern reader to penetrate the mind of a medieval teacher of logic, probably working in a monastic environment.

As I have anticipated, the main aim underlying the composition of the *Nove introductiones* appears to be simplicity and efficacy. In the further treatment of the proposition, listed in Clm. 10542 under the heading “Propositio contrarietas [sic]”, the author inserts the famous figure representing the square of opposition, to present a visible aid to distinguish between contraries, subcontraries, contradictory and subaltern kinds of propositions. The use of this figure was common in the school tradition, and the same figure can be found in Peter’s *Summule*;⁴¹ on the other hand Llull never used such a figure in any of his logical works, and its presence in the *Nove introductiones* reinforces the miscellaneous character of this work, which summarizes the main teachings of logic in use in the schools of the time. Moreover, the presence of this figure confirms the “normalizing” aim behind the *Nove introductiones*, as a “normal” student of logic would expect to find such a figure in his textbook.

³⁸ Boethius, *De differentiis topicis*, Patrologia Latina 64, col. 1174.

³⁹ Ramon Llull, *Logica nova*, ROL XXIII, p. 97.

⁴⁰ Edition offered in Buonocore, *A Basic Handbook*, p. 238.

⁴¹ Peter of Spain, *Tractatus*, p. 6; Peter of Spain, *Trattato di Logica*, pp. 14-15.

In the representation of this figure there is a major difference between the manuscripts, as the Riccardiana 1001 reports the figure exactly as it is known in the logical tradition, with the conventional examples inscribed into it: “Omnis homo currit, Nullus homo currit”, etc. Instead, Clm. 10452 offers an identical figure but the examples contained in it are completely different and clearly show a Lullian background: “Omnis bonitas est magna, Nulla bonitas est magna”, etc.⁴²

It is interesting to note that in the whole text of the *Nove introductiones* the only figures that appear are those used in the tradition of the schools of logic: the figures of the Lullian Art are completely absent. Such an evident absence, definitely reflects the need to give a “normalized” account of Lullian logic, one which would not look too different and alarming to the students, even in its graphic form. Consequently, the acquisition of a basic knowledge of the Lullian Art was supposed to take place at a separate time, as it is shown by the fact that in Riccardiana 1001 the text of the *Nove introductiones* is followed by the reproduction of the figures of the *Ars brevis* and by the text of the authentic Lullian *Ars brevis*. In Clm. 10542, the separation of the two moments, the learning of the *Ars* and the learning of logic is even more clear, as the manuscript presents only texts that deal with logical problems: the authentic Lullian *Liber de novis fallaciis* and the *Nove introductiones*. Clearly, in such a context, the learning of the Lullian Art was intended to happen at another time, from a separate book, in a different manuscript.

A few paragraphs after the representation of the square of logical opposition, Riccardiana 1001 gives further confirmation of the use of this text in a school context. After the treatment of contradiction, there are four lines, added at the bottom of the page by a different hand: these were verses of common usage in the schools, as a mnemonic device to remember different ways of performing conversions between different kinds of propositions.⁴³ Our text was used to learn logic, and therefore it was important to provide it with further notes helping the students to remember important passages.

In the course of the exposition of the section on proposition, the *Nove introductiones* offers two more figures representing squares of logical opposition between propositions: one deals with the use of syncategorematic parts of dis-

⁴² The figure appears in both mss. Riccardiana 1001, f. 20v. and Clm. 10452, f. 45v. Reproduction offered in Buonocore, *A Basic Handbook*, pp. 244, 393, and 395.

⁴³ “Feci simpliciter convertitur eva per acci. Asto per contra. Sic fit conversio tota. Asserit A, negat E sed universaliter ambe. Asserit I, negat O, sed particulariter ambe”, found in ms. Riccardiana 1001, at the bottom of f. 21r.

course (like *omnis*, every, or negations), while the other deals with modal propositions and the concepts of possibility, impossibility, contingency and necessity.⁴⁴

Unfortunately, I have not found trace of the first figure, which could be an original elaboration of the author, or could come from an unknown treatise of logic: in the treatment of the *aequipollentie* it seems very close to William of Sherwood's *Introductiones in logicam*.⁴⁵ It is even more interesting to note that this first figure is also absent from Clm. 10542, and therefore it seems linked specifically to the context of Riccardiana 1001. The second figure is also present, with the exact same examples offered, in the *Summule logicales*; and in this part the very structure of the *Nove introductiones* resembles that of Peter's text, as it treats first the hypothetical proposition, and then the modal propositions, talking about their equipollences, their contraddictions and then ends with the figurative representation.⁴⁶

In explaining how to treat modal propositions, the author pays attention to clarify grammatical concepts such as that of copula and that of predicate. Moreover, he distinguishes between two senses of each sentence: the divisive sense and the compound sense. Such division is absent in the *Summule* and in Llull and it seems to point towards an early influence of Ockham's *Summa logicae*.⁴⁷ In fact, it was Ockham that introduced the distinction between divisive and compound sense, in his discussion on modal propositions: such a distinction is similar to that between the 'de dicto'/'de re' meaning of a modal sentence, though the two do not completely overlap.⁴⁸ What is interesting to note here is

⁴⁴ In ms. Riccardiana 1001, the figure appears at f. 21v. Reproduction offered in Buonocore, *A Basic Handbook*, p. 394.

⁴⁵ William of Sherwood, "Introductiones in logicam", ed. C. Lohr, *Traditio* 39 (1983), pp. 219-299.

⁴⁶ Peter of Spain, *Tractatus*, pp. 8-16; Peter of Spain, *Trattato di Logica*, pp. 20-37. In Riccardiana 1001, the figure appears at f. 22r, while in Clm. 10542 at f. 47v. Reproduction offered in Buonocore, *A Basic Handbook*, p. 396.

⁴⁷ Santi, "Osservazioni sul manoscritto 1001" (cited *supra*, n. 4), pp. 262-263.

⁴⁸ For further information on this topic see also the article from G. Priest and S. Read, "Ockham's Rejection of Ampliation", *Mind, New Series*, Vol. 90 (1981), pp. 274-279. In particular when they say "In general, in a composite interpretation, necessity (necessary truth) is predicated of a sentence, whereas in a divisive interpretation, necessity is attached to a predicate and the compound predicate is asserted of the subject. The distinction is close to that between de dicto and de re modalities. However, one should note that a composite interpretation is not quite what is currently called a de dicto modality. For in the composite case, the modal operator is a predicate of sentence names, whereas in the (modern) de dicto case the modal operator is a unary sentence connective", p. 275. See also Ockham's *Summa logicae*, ed. Boehner (St. Bonaventure, NY: 1974), vol. II, cap 9, p. 273 lines 12-14/ 20-21 "propositio modalis primo modo dicta semper est distinguenda secundum compositionem et divisionem. In sensu compositionis semper denotatur quod talis modus verificetur de propositione illius dicti... Sed in sensu divisionis talis propositionis semper aequipollet propositioni acceptae cum modo, sine tali dicto...".

the fact that the author of the *Nove introductiones* was already aware of this distinction, which helps date the text to at least the late 1330s, since the *Summa logicae* was finished around 1327, and probably circulated among Franciscan Italian circles shortly thereafter.

The use of Ockham in the *Nove introductiones* is still reduced to a minimum, which probably means that the author was not completely familiar with the logical innovations present in the *Summa logicae*. It will be the very need to come to terms with the new Ockhamistic point of view, the nominalistic approach, that will push the anonymous author of the *Loyca discipuli* to write his introduction to the *Nove introductiones*. Probably already a few years after its composition, the *Nove introductiones* is not felt as “new” anymore and needed to be integrated with an updated introduction which would enable the student of logic, and the future preacher, to participate in the current debates and to win logical arguments with the master logicians coming out of the universities of the time.⁴⁹

The text of the *Nove introductiones* then continues its account of modal propositions by quoting *verbatim* parts of an authentic Lullian text: the *Liber de possibili et impossibili*, dated Paris 1310, to which the reader is also explicitly advised to refer for further instruction on the topic. The author enthusiastically describes the Lullian Art as scientific, “ars scientifica seu artificiosa scientia”, and as the way to really understand possibility, impossibility, necessity and contingency. In this account, Llull himself becomes an almost legendary figure, whose given name already shows in its etymology the destiny of its bearer: “illius sacri doctoris radii lucentis in mundo”, Raimundus, he who brings a ray of light in the world, according to the common medieval principle that ‘nomina sunt consequentia rerum’ or more properly said “nisi enim nomen scieris, cognitio rerum perit”.⁵⁰ The identification of this Raimundus with Llull is then ensured by the reference to his geographical origin: “philosophus magnus cathalanus”.

The passage immediately following is entirely taken from the *Liber de possibili et impossibili*:⁵¹ it blends four lines from the introduction (lines 11-14), with three lines from the paragraph “De divisione huius libri” (lines 21-23) and then it quotes *verbatim* the first three paragraphs of the first distinction (covering the lines 36-45), before referring to the direct source for further examples.

⁴⁹ Such a desire to write updated versions of handbooks for logic in the 14th century is attested throughout the scholastic tradition. See, for instance, Jan Pinborg, *Logica e semantica nel Medioevo* (Torino: Einaudi, 1984), pp. 133-154.

⁵⁰ *Sancti Isidori Hispalensis Episcopi Etymologiarum Libri XX*, ed. Migne, vol 82 [cap. VII- 0082B].

⁵¹ Ramon Llull, *Liber de possibili et impossibili*, ROL VI, pp. 384-386.

III) The predicables

After this explanation, the text goes on to tackle the problem of the third principle of logic, namely the predicables, and it provides definitions for: *genus*, *species*, *differentia*, *proprietas* and *accidens*. The treatment of predicables again blends a Lullian and a scholastic approach, and follows closely the exposition of the *Summule logicales*. The predicable in general is defined as “ens seu universale, seu de pluribus dicibile”, summarizing what Peter of Spain said “dicitur ‘predicabile’ quod de pluribus predicatur” and a few lines below “‘predicabile’ proprie sumptum et ‘universale’ idem sunt.”⁵²

The specific treatments of genus, species, difference, propriety and accident appear to be the result of an effort to summarize all the divisions present both in the Lullian and scholastic traditions: the various predicables are presented as if in a combinatory device, which is a clearly Lullian trait, but the various divisions seems to follow more closely Peter’s explanation.

The importance of the combinatory device to gain a broader and more complete understanding of the topic is clearly stated in the text at the end of the definition of genus: “Causa combinationis predictae est, ut cum instrumentalibus principiis genus investigetur et cognoscatur, quod iter est introducentis facere”. The logician should use the division provided by the text together with the instrumental principles of the Lullian Art to deepen his knowledge of the predicables. In a coherent manner, the examples offered in the text come both from a scholastic and Lullian background. The scholastic part comes from Peter of Spain’s *Summule*,⁵³ and though the Lullian text from which this part depends cannot be exactly identified, the Lullian import is made apparent by the use of the *principia*, such as: “Species universalis [...] habet in se specialem entitatem bonitatem et cetera.”

The author of the *Nove introductiones* continues his exposition with an analysis of the *predicamenta*, or categories: in this section is again evident the compound character of this text, which mixes Lullian and scholastic elements, probably in an effort to normalize and put to didactic use those features of the Lullian tradition that were most alien to a scholar of the time. The ten *predicamenta* are: substance, quantity, quality, relation, action, passion, habit, time, space. Each of them is treated as if part of a combinatory device (similar to a Lullian wheel), exactly as we have seen for the predicables. For each of the *predicamenta* we only have the definition according to the first combination

⁵² Peter of Spain, *Tractatus*, p. 17; Peter of Spain, *Trattato di Logica*, pp. 38-39.

⁵³ Peter of Spain, *Tractatus*, pp. 17-25; Peter of Spain, *Trattato di Logica II, De predicabilibus*, pp. 38-59.

with a question: namely, *substantia quid*; *quantitas quid*; *qualitas quid*, etc. This is the same mechanism Llull himself used to define the *predicamenta* in the *Logica nova*, and the author of the *Nove introductiones* seems to be following this account, mainly shortening and simplyfing it. Taking the definition of *substantia* as an example, one can compare the treatment of this topic in the two texts. The text of the *Nove introductiones* begins:

Substantia quid. Substantia est ens per se existens, habet in se formam, materiam et coniunctionem; vel aliqua quibus forma et materia et coniunctio simulantur, que sunt substantie essentialia et naturalia, sine quibus ista substantia esse non posset. In tanto quod substantia per formam est substantiva, id est substantialiter activa, et per materiam substantiabilis, id est substantialiter passibilis vel agibilis, et per coniunctionem habet substantiare.⁵⁴

The *Logica nova* instead has:

Lines 20-21. "Substantia quid est?. 1.Substantia est ens, quod per se existit. [...]"

Lines 34-35 "2. Habet vero substantia in se naturaliter et primarie formam et materiam et coniunctionem, quae sunt de sua essentia. Per formam est substantiva, per materiam est substantiabilis, per coniunctionem habet substantiale substantiare".⁵⁵

It is interesting to note not only the way in which the *Nove introductiones* depends on the *Logica nova*: which parts of the Lullian text have been subsumed in the new textbook and which have been left out, but also the fact that the author of the *Nove introductiones* here makes a conscious effort to use one of the most typically Lullian innovation, namely the correlative stucture. Basically, substance is defined, in an almost circular manner, as divided into *substantiva-substantiare-substantiabilis*. *Substantiva* is that which has the active power of making substance. *Substantiabilis* is that which can become a substance, and *substantiare* is the action that gives substance, in an analogous way to the definition of man as "homo est animal homificans", found in the *Ars brevis*.⁵⁶

At this point the text inserts another figure: the *arbor porphyrianus*, which represents the various subdivisions of substance. The *Summule logicales* presented this figure at the end of the section on the predicables, while the *Logica nova* contains the *arbor porphyrianus* as the first part of the *arbor naturalis et logicalis* (the tree itself, without the questions which form the roots of the tree): I believe that in a way the presence of the *arbor porphyrianus* here is a perfect

⁵⁴ Edition offered in Buonocore, *A Basic Handbook*, p. 262.

⁵⁵ Ramon Llull, *Logica nova*, ROL XXIII, p. 57.

⁵⁶ Ramon Llull, *Ars brevis*, ROL XII, p. 226.

example of the syncretic attitude of the author of the *Nove introductiones*.⁵⁷ In explaining the various *predicamenta*, or categories, the text shows more clearly than in other section its Lullian imprint. In talking about relation it uses again two explicitly Lullian features: the *demonstratio per aequiparantiam* and the repeated use of the correlative structure:

Et sic habet tres species, quarum prima est secundum equalitatem et dicitur equiparantia, et est quando aliqua equalia necessario se respiciunt, sicut inter calefactivum caleficabile caleficare, intellectivum intellegibile intelligere.⁵⁸

The part on the categories ends with a note reminding the student to pay attention to the difference between substance and accidents, and between substantial and accidental qualities: it appears from these few lines that the aim of the author of the *Nove introductiones* is not only to instruct a future logician, but to lay the basis for a full education in philosophy, which would include natural and moral philosophy, and, eventually, arrive to the study of theology.

b. Elements of a Theory of Demonstration in the Nove introductiones

The fifth and last section of the *Nove introductiones* occupies more than half of the text; it concerns the various manners of carrying out an argument, and it stresses the importance for a logician (or for a preacher) to be able to create well formulated arguments to prove a point. The text uses the general term *argumentatio* to indicate the fifth logical principle, which is then divided into the four specific ways of solving such an argument: namely, *probatio* (which includes all sorts of demonstrations and the most powerful tool for the logician, the syllogism), induction, entimema, and example. This part is again in part dependent on Peter's *Summule*, V, *De argumento*, combined with more typically Lullian concepts, which appear to be directly dependent on the *Logica nova*.

The first section deals with the problems posed by the so-called *probatio*, proof, and it includes the whole Lullian theory of demonstration, since *probatio* is defined as “*probatio est argumentum in quo veritas est apparens*”. This definition is a *verbatim* quote from *Logica nova* V, 10, line 196,⁵⁹ and even the rest of

⁵⁷ Peter of Spain, *Tractatus*, p. 20, and section III, *De predicamentis*, pp. 26-42; Peter of Spain, *Trattato di Logica*, III, *De predicamentis*, pp. 60-95 and also pp. 46-47, which contains the figure of the *arbor porphyrianus*. In Riccardiana 1001, the figure appears at f. 23r, while in Clm. 10542 at f. 49r. Reproductions offered in Buonocore, *A Basic Handbook*, p. 396.

⁵⁸ Edition offered in Buonocore, *A Basic Handbook*, p. 265.

⁵⁹ Ramon Llull, *Logica nova*, ROL XXIII, pp. 107-108 and pp. 112-114.

the paragraph seems to be a rewording and a shortening of the paragraph *De probatione* in the authentic Lullian text; on the other hand Peter's *Summule* do not offer an equivalent definition for the whole system of proving an argument.

Moreover, the structure of the *Nove introductiones* here does not resemble that of the *Summule logicales*, but it seems to be an original elaboration which blends Llull's teaching with those of Peter of Spain. The *Nove introductiones* qualifies the first way of proving an argument as demonstration, and then proceeds to describe the three main kinds of demonstration to be used by the logician: the two typical scholastic demonstrations *propter quid* or *a priori*, the *demonstratio quia*, or *a posteriori*, and the originally Lullian *demonstratio per aequiparantiam*. Here the treatment of demonstration is longer and more accurate than in the section *De demonstratione* in the *Logica nova*, and the text seems to be influenced by Llull's exposition of his theory of demonstration in the *Ars demonstrativa*.⁶⁰ The *Logica nova*, though, still conditioned the order of presenting the three demonstrations in the *Nove introductiones* as the *Ars demonstrativa* presents the *demonstratio per aequiparantiam* as the first species of demonstration, while the *Logica nova* examines it as the third and last kind of demonstration and the *Nove introductiones* follows its lead. Moreover, there has to be an additional source used in the elaboration of this passage since it offers a typical scholastic wording, especially in the definition of demonstration.

The *Summule logicales* do not offer any definition for the term *demonstratio*: here the wording of the *Nove introductiones* seems to be dependent on Thomas Aquinas' exposition of Aristotle's *Posterior analytics* or an analogous text. The similarity emerges clearly seeing the two texts in parallel:

<i>Nove introductiones</i>	<i>Thomae de Aquino Expositio libri posteriorum analyticorum (Lectio IV)</i>
Demonstratio est aliquid ignoti per aliquid notum vel alicuius minus noti per aliquid magis notum cognitio, seu intellectui manifestatio. ⁶¹	Vel dicendum quod in omni demonstratione, oportet quod procedatur ex his, quae sunt notiora quoad nos, non tamen singularibus, sed universalibus. Non enim aliquid potest fieri nobis notum, nisi per id quod est magis notum nobis. ⁶²

Nevertheless, the fundamentally Lullian character of the theory of demonstration exposed here emerges from the use of examples, which involve the Lullian

⁶⁰ Ramon Llull, *Ars demonstrativa*, *MOG* III, pp. 1-2 (93-94); *ROL* XXXII, pp. 6-7.

⁶¹ Edition offered in Buonocore, *A Basic Handbook*, p. 270.

⁶² *Thomae de Aquino Expositio libri Posteriorum Analyticorum* (Lectio IV), edito Leonina, [79493] *Expositio Posteriorum*, lib. 1 l. 4 n.

principia, and from the presence and emphasis given to the *demonstratio per aequiparantiam*, which represent the strongest way of argumentation and it is mainly applicable to God, the perfect subject, in which there is no discordance and in which there is a perfect equivalence between all the absolute principles or *dignitates*. Demonstration is the first step to create true science, and the main tool to carry out a demonstration is the syllogism, therefore the *Nove introductiones* follows with an exposition of the syllogistic way of argumentation.

The fourth book of the *Summule logicales* provides an explanation of the syllogism, but the text of the *Nove introductiones* does not seem to be directly dependent on it.⁶³ On the other hand, in this section the debt to the Lullian tradition is even more evident, since the exposition of the syllogism puts the accent on the importance of the middle term, and on the ways of finding it and using it correctly. The ideas expressed in this section are akin to those expressed in the *Liber de venatione substantiae, accidentis et compositi*, especially to its *distinctio VII*, the *De venatione medii*, even if the *Nove introductiones* does not depend *verbatim* on this text.⁶⁴

It instructs the logician to search for the middle term by analyzing it through the relative principles: *differentia, concordantia, contrarietas, principium, finis, maioritas, minoritas* and *equalitas*. Moreover, the structure of the exposition of the syllogism resembles closely that of Llull's *Logica nova*, V, 11: the text uses a combinatory structure, examining the syllogism through the use of the ten general questions. The definition of syllogism, for example, is given in the section *Sillogismus quid*, and it quotes *verbatim* that of the *Logica nova*.

<i>Nove introductiones</i>	<i>Logica nova</i>
<p>Sillogismus quid.</p> <p>Sillogismus est argumentum ex tribus veris et necessariis propositionibus constitutus. Dicitur sillogismus argumentum, eo quia argumentum est suum genus; argumentum enim potest esse verum vel falsum, sillogismus est qui semper est verus.⁶⁵</p>	<p>De syllogismo</p> <p>Syllogismus est argumentum, ex tribus ueris et necessariis propositionibus constitutum.⁶⁶ Dicimus autem quod syllogismus est argumentum, eo quod argumentum est suum genus. Cuius ratio est, quia argumentum enim potest esse uerum vel falsum, sillogismus es qui semper est uerus.⁶⁷</p>

⁶³ Peter of Spain, *Tractatus*, IV *De syllogismis*, pp. 43-54; Peter of Spain, *Trattato di Logica*. IV *De syllogismis*, pp. 96-125.

⁶⁴ Ramon Llull, *Liber de venatione substantiae* (cited *supra*, n. 26), pp. 83-91.

⁶⁵ Edition offered in Buonocore, *A Basic Handbook*, p. 276.

⁶⁶ The *Logica nova* has "constitutum" in the accusative, which modifies "argumentum", while the *Nove introductiones* has "constitutus", which modifies "sillogismus". I believe that the unknown author of the *Nove introductiones* slightly misunderstood the text of the *Logica nova* and thus interpreted the whole syllogism as made of three parts, instead of as an argument made of three parts.

⁶⁷ Ramon Llull, *Logica nova*, ROL XXIII, p. 96.

The *Logica nova*, though, offered a more complete definition of syllogism in the section *Syllogismus quid est?*,⁶⁸ which appears to be the source for the rest of this paragraph. The author of the *Nove introductiones*, in fact, goes on explaining explicitly what Llull said implicitly by referring the reader to a specific rule of his Art, in an operation that seems similar to a gloss.

<i>Nove introductiones</i> ⁶⁹	<i>Logica nova</i> ⁷⁰
Sillogismus habet in se tres propositiones, scilicet maiorem, minorem et conclusionem, que sunt eius essentielles partes...	2. Syllogismus habet duas propositiones et unam conclusionem, sibi coessentialia. Vt per secundam speciem regulam...

And the text reproduces and explains all the four points that form the section of *Syllogismus quid* in the *Logica nova*:

<i>Nove introductiones</i> ⁷¹	<i>Logica nova</i> ⁷²
Sillogismus est in anima mentalis conceptus cum tribus propositionibus veritatem indicans, in ore est vocalis ratiocinatio, in scripto scripta Sillogismus habet in subiecto cui est habitus veram et necessariam indicantiam, propter quam verum et falsum cognoscuntur [...].	3. Syllogismus est in anima conceptione, in ore autem pronunciatione, veritatem indicans demonstratiue [...]. 4. Syllogismus habet in subiecto ueram et necessariam indicantiam, per quam necessarie uerum et falsum cognoscitur [...].

After that, the author of the *Nove introductiones* refers to the various other questions, directing the reader to continue with the explanation of the rules in a similar fashion: “Sillogismus de quo est, vade ad tertiam regulam et suas species. Sillogismus quare est, vade ad quartam...”. This way of proceeding is very common in works of the pseudo-Lullian tradition, and we can observe it in other works, not only of logic but also of mnemonics such as the *Liber ad memoriam confirmandam*.⁷³

Before the section on the figures of the syllogism, the author of the *Nove introductiones* presents a short paragraph on the nine general subjects: such a

⁶⁸ Ramon Llull, *Logica nova*, ROL XXIII, V, *De syllogismo*, p. 109.

⁶⁹ Edition offered in Buonocore, *A Basic Handbook*, p. 276.

⁷⁰ Ramon Llull, *Logica nova*, ROL XXIII, V, *De syllogismo*, p. 109.

⁷¹ Edition offered in Buonocore, *A Basic Handbook*, p. 277.

⁷² Ramon Llull, *Logica nova*, ROL XXIII, V, *De syllogismo*, p. 109.

⁷³ Pseudo-Ramon Llull, *Liber ad memoriam confirmandam*, ed. C. Lohr and A. Madre, *SL* 36 (1996), pp. 99-121: “Primo enim: ‘quid’ habet tres species, quas hic propter earum prolixitatem ponere non curo; sed vade ad quintum subiectum...”, p. 120.

section is typical of the texts of the Lullian *Ars*, and a similarly titled section can be found both in the *Ars generalis ultima* and in the *Ars brevis*.⁷⁴ The nine subjects were one of the devices introduced by Llull at the beginning of the so-called ternary phase of his Art: they allowed the artist to gain knowledge of the whole of human wisdom and to create, using them, a ladder of being, through which the intellect could ascend and descend between different levels of reality. The text of the *Nove introductiones* summarizes the already shortened version of the *novem subiecta* present in the *Ars brevis*,⁷⁵ reducing them to little more than a list, of which the first four are God, angel, heaven (or sky), man. The fifth subject is more interesting since it shows a clear philosophical misunderstanding on the part of our author: in the Lullian tradition the fifth subject is normally the imaginative faculty, or *imaginativa*, whereas our text has *irrationabile*, which makes no real sense as it is not a faculty of the soul. The sixth subject is the *vegetabile*, which should probably be identified with the vegetative faculty that constitutes the seventh subject in the *Ars brevis*. The seventh subject in the *Nove introductiones* is the *elementatus*, which corresponds to the elementative faculty that is posed as the eighth subject in the *Ars brevis*. The last subject in the *Nove introductiones* is the *artificium*, which, according to the text, refers to the *moralitates* and which corresponds in the *Ars brevis* to the *instrumentativa*, the faculty that includes the ability to judge and act morally.⁷⁶ It is interesting to note how the author of the *Nove introductiones* always seems to reduce the philosophical import of all the nine subjects, rendering them more material than intellectual by giving concrete examples for them, as if to stress the need for a practical application of logical theories.⁷⁷

Finally, the *Nove introductiones* explains how to form the figures of the syllogism: in this section is again apparent the influence of the *Summule logicales*, as the terminology applied, both in the explanation and in the examples, is that of the scholastic tradition and not that of the Lullian Art. For example, the definition of figure of a syllogism seems to be directly dependent on the *Summule*.

⁷⁴ Ramon Llull, *Ars generalis ultima*, ROL XIV, pp. 189-315. Llull, *Ars brevis*, ROL XII, pp. 222-230.

⁷⁵ Ramon Llull, *Ars brevis*, ROL XII, pp. 222-230.

⁷⁶ The *Ars generalis ultima*, as well as the *Nove introductiones*, uses the term *artificium*, and it could provide a Lullian precedent for this terminology.

⁷⁷ For example, the irrational subject is exemplified in the text by the brute animals, both volatile, terrestrial and who live in the water; the vegetable subject is exemplified by plants, trees et similia, the *elementatum* is exemplified by metals, rocks etc.; the elements are described as "the primordial chaos and the four elements" and finally an example of the *artificium* are the mechanical and liberal arts.

<i>Nove introductiones</i>	<i>Summule logicales</i>
Figura, pro ut hic sumitur, est debita terminorum in premissis ordinatio in subicendo vel predicando; que sunt tres. ⁷⁸	Figura est ordinatio trium terminorum secundum subiectione et predicationem. Hec autem ordinatio fit tripliciter [...]. ⁷⁹

The exposition of the three figures then follows the normal scholastic rules: the propositions are defined using letters of the alphabet according to the standard code of the schools, and the numerous examples offered do not include any that uses specific Lullian terminology.

The second species of argument is induction, which represents a form of argument inferior to the well-formed syllogism. The *Nove introductiones* here once again appears to integrate the scholastic with the Lullian tradition, as induction is characterized mainly through the use of examples, which make ample use of Lullian terminology. The examples offered in this section are particularly interesting as they point out to specific application in the sphere of theology and tackle important problems such as the resurrection of Christ and of the virginity of Mary.

The *Nove introductiones* reserves a similar sort of treatment to the third and fourth species of argumentation, namely to the enthymeme and the example: both are explained integrating the typical scholastic definition with examples taken from a Lullian background. The exposition of the argument continues with a brief analysis of the *loci*, the places of the argument. The author of the *Nove introductiones* chooses to limit himself to the main three *loci*: the *locus a maiori*, the *locus ab equali*, and the *locus a minori*. The text seems to assimilate and shorten the treatment of the *loci* found both in Peter of Spain's *Summule logicales* and in Llull's *Logica nova*, mixing a traditional scholastic account of the places of argumentation with examples taken from the Lullian repertoire, as it has been the rule for most of this handbook of logic.⁸⁰

The following section gives a definition of antecedent and consequent, namely of what comes before and what comes after in a demonstration: though the language used seems mostly of Lullian background, the exact Lullian referent behind this paragraph cannot be identified. Nevertheless, the main purpose of this section clearly is to reaffirm the realist import of whatever the logician is able to prove by means of syllogism or in general by logical means. The text

⁷⁸ Edition offered in Buonocore, *A Basic Handbook*, p. 280.

⁷⁹ Peter of Spain, *Tractatus*, p. 44; Peter of Spain, *Trattato di Logica*, p. 98.

⁸⁰ Ramon Llull, *Logica nova*, ROL XXIII, pp. 102-104; and Peter of Spain, *Tractatus*, V *De locis*, pp. 55-78; Peter of Spain, *Trattato di Logica*, V *De locis*, pp. 126-185.

stresses that it exists a natural and a real antecedent and consequent, not only a logical one, and that the rules used to investigate logic are well grounded in nature and reality: “iste regule sunt multum in natura et realitate fundate”.⁸¹

The last species of argument addressed by the *Nove introductiones* is the paralogism, or fallacious reasoning. This section seems to depend on *Logica nova*, V, 13, *De paralogismo*: the definition of paralogism is quoted *verbatim*, “Paralogismus est argumentatio indicans esse uerum, quod falsum est”.⁸² The *Nove introductiones* reads: “Paralogismus est argumentatio indicans esse verum quod falsum est et e contrario. Et dicitur paralogismus quasi apparens sillogismus”,⁸³ though the Lullian definition is mixed with a curious etymology of the word paralogismus which seems to be taken from Thomas Aquinas’ *Commentary on posterior analytics*: “sed paralogismus, idest apparens syllogismus”.⁸⁴

The main reason behind the formation of fallacious reasoning, or paralogism, is a mistaken treatment of the middle term, what the text calls *diversitas medii*, and the various kinds of fallacies can be organized according to which sort of mistake happens in the treatment of the middle term. The two main groups of fallacies are the six fallacies *in dictione* and the seven fallacies *extra dictionem*. In the treatment of the fallacies *in dictione* the *Nove introductiones* follows the scheme proposed by the *Logica nova*, as the first one proposed is the *fallacia equivocationis*, followed by the *fallacia amphibolie*, then by the *fallacia compositionis*, the *fallacia divisionis*, the *fallacia accentus*, and by the *fallacia figure dictionis*. The *Summule logicales* presents this same scheme, though the treatment of each fallacy is longer and more accurate. The text of the *Nove introductiones* appears to be closer to the Lullian model than to the scholastic one, since the analysis of each fallacy is shorter, though the examples offered do not use specific Lullian terminology, but seem instead to be directly taken from the scholastic tradition.

The same principle applies to the fallacies *extra dictionem*, which are exposed following the guidelines of the *Logica nova*. After a short introduction, in which it explains the differences between the fallacies *in dictione* and *extra dictionem*, the text lists the seven fallacies that will be described in the next paragraphs. The wording of the introduction mirrors closely that offered by *Logica nova* V, 14, b,⁸⁵ while it is fairly different from that present in the *Sum-*

⁸¹ Edition offered in Buonocore, *A Basic Handbook*, p. 293.

⁸² Ramon Llull, *Logica nova*, ROL XXIII, p. 112.

⁸³ Edition offered in Buonocore, *A Basic Handbook*, p. 294.

⁸⁴ *Thomae de Aquino Expositio libri Posteriorum analyticorum* (Lectio IV), edito Leonina, [79647] Expositio Posteriorum, lib. 1 l. 22 n. 2.

⁸⁵ Ramon Llull, *Logica nova*, ROL XXIII, p. 120, lines 838-850.

mule logicales. The order in which the fallacies are introduced is also identical to that of *Logica nova*; this was the canonical scheme for the exposition of this topic, and Peter's *Summule* followed a similar scheme. Recently A. Fidora and G. Wyllie have shown that Thomas Aquinas treatise *De fallaciis* should be considered a source for Llull's *Logica nova*, and therefore for all the pseudo-Lullian logical treatises influenced by the *Logica nova*.⁸⁶

The *Nove introductiones* explains first the *fallacia accidentis*, followed by the *fallacia secundum quid et simpliciter*, then the *fallacia ignorantia elenchi*, the *fallacia petitionis principii*, the *fallacia consequentiis*, the *fallacia secundum non causam ut causam*, and in the end the *fallacia secundum plures interrogationes ut una*. It is interesting to note here that, though the author of the *Nove introductiones* is clearly a Lullian scholar, he does not include in his list the most specific Lullian fallacy, the *fallacia contradictionis* also known as the *fallacia Raimundi*, added to the treatment of the thirteen fallacies by Llull in the *Logica nova* and to which he dedicated a specific book, the *Liber de novis fallaciis*. Nevertheless, the language used in this final section on the fallacies bears the clear marks of the Lullian tradition, as the author refers the reader to the principles and the rules of the *ars* to deepen their knowledge and ability to solve sophisms, and states that he has chosen not to explain them more in detail only for brevity's sake: "que explicare non curo, ne hoc opus ultra debitum prolongetur".⁸⁷

c. The End of the Text: Methods of Arguing and the Explicit

After the treatment of the fallacies, the *Nove introductiones* introduces a section that addresses the problem of how a logician should behave in a dispute, *De modo disputandi*. This passage starts with a definition of *disputatio*: although the *Summule logicales* offered a similar section on the definition of dispute right before the treatment of the fallacies, the language and the content of this paragraph are evidently different. Moreover, the terminology and the concepts used betray a clearly Lullian origin, and the Lullian source for this passage is probably to be identified with the *Proverbis de Ramon*, Ch. 248, which offers a very similar definition of *disputatio*. The dispute is defined here,

⁸⁶ See Alexander Fidora and Guilherme Wyllie, "Ramon Llull i el tractat *De fallaciis* del pseudo-Tomàs d'Aquino", *Enrahonar. Quaderns de Filosofia* (2008-09), pp. 11-19. The authors do not mention explicitly the *Nove introductiones*, though they refer to the *Logica parva*, which is part of the same tradition.

⁸⁷ Edition offered in Buonocore, *A Basic Handbook*, p. 311.

as in the *Proverbis*, in terms of a “spiritual contrariety”, manifested through speech showing how two intellects are against each other. The desire to give a set of rules for an intellectual dispute is another feature that betrays the didactical purpose of this text, and the way in which the unknown author of the *Nove introductiones* formulates such rules is one of his most original contributions.⁸⁸

As a good schoolmaster, the author here gives instructions to his readers about how to conduct a dispute. The first precept concerns the internal disposition of the participants: it is necessary to have a free mind, *intellectus liber*, along with the intention to discover truth and to distinguish it from falsehood. The true victory for the logician is not simply to win the dispute; it is to reach the truth. The second piece of advice consists in reminding the reader to apply the notions reviewed till now in the book and therefore of using the techniques of demonstration acquired so far, while the third guideline stresses the need for brevity in a dispute. Then the author focuses again on the mental state of the two participants in the dispute, pointing out that there needs to be an intellectual friendship between them, *amicitia*, to avoid pointless arguing, “que refrenet particularem contrarietatem”; moreover there should not be any ire, because anger can obfuscate judgment, “intellectum obfuscat”, and both words and gestures during the argument should be polite, “modestia, curialitate et alacritate”.⁸⁹ The final four warnings concern the matter of the dispute: the importance of coherence, not to change the terms of discussion in the middle of the argument, to assume a set of common principles and to follow the consequences of such principles.

To conclude, the author cautions the future logician against the temptation of simply pointing out the logical fallacies in the opponent’s argument: it is fundamental to explain carefully the sources of error and to show how the correct reasoning should have followed from the right combination between the principles and the rules.

After this section, the author includes a short paragraph on logic as a discipline, since logic is the first subject that needs to be studied and forms the basis for acquiring any other knowledge. Logic becomes here the theme for a set of questions, investigated using the rules of the Lullian Art: “*Questio est utrum ordine doctrine addiscendi quamcumque aliam artem logica precedere debeat*”.⁹⁰

⁸⁸ A. Bonner i M. I. Ripoll, *Diccionari de definicions lul·lianes. Dictionary of Lullian Definitions* (Barcelona / Palma de Mallorca: Universitat de Barcelona / Universitat de les Illes Balears, 2002,) p. 147: “Disputatio est spiritualis contrarietas quae per verba manifestat conceptionem quam unus intellectus habet contra aliud. [Prov] III.27-ProvRam 248”. This definition is taken from the *Proverbs the Ramon*, Ch. 248.

⁸⁹ Edition offered in Buonocore, *A Basic Handbook*, p. 312.

⁹⁰ Edition offered in Buonocore, *A Basic Handbook*, p. 314.

The author of the *Nove introductiones* seems to be following an authentic Lullian model here, as almost all the works of Ramon Llull on the Art or on logic end with a section on the questions, *de quaestionibus*, but the exact source of this part could not be identified, as the treatment offered here is too short, and it can basically be reduced to a list of the ten questions to be resolved in order to learn logic more deeply: “In quarum solutionibus maxime de logica et de hiis que ad eam pertinent pandetur notitia”.⁹¹

The text of the *Nove introductiones* ends with a sort of long explicit, an explanatory paragraph entitled “De hiis que ad huius operis notitiam preexhiguntur”, in which the author gives additional advice to his reader, the young, *iuuenis*, about the preliminary knowledge necessary to understand his *novum compendium* for logic; such preexistent knowledge should consist mainly of the principles and the rules of the Lullian Art, therefore these lines serve the author as an excuse to openly declare his admiration for Ramon Llull’s teachings. Once more Ramon Llull is defined as “sanctus homin et christianissimus”, who has received his Art in a direct revelation from Christ. It is important to observe how in closing his text the author chose to recall his earlier etymological explanation for Llull’s own name as a sign of his destiny, as a *nomen omen*, in a gesture which creates a sort of ring structure embedded in the recurrence of the name *Raymundus*, which he decodes as basically meaning ray of light for the world: “qui Raymundus nomine dictus, Lulii cognomine dignus: et bene Raymundus Lulii, qui vere radius lucis mundi”.⁹²

Thus, at the very end of the *Nove introductiones* the author qualifies himself again as a disciple of Llull. In addition, in the short section *De fine*, he humbly declares to be “small in science and even smaller in manners”, in a sort of *captatio benevolentiae*, which ends in a typically Lullian *explicit*, which includes the dedication of his work to the love of God:

Ego vero artis philosophorum philosophi iam dicti discipulus, licet ad huiusmodi nomen indignum exprimi fore rear, et hoc quia in scientia parvulus et in moribus minimus hoc operi principium, medium et finem dedi, virtute et gratia illius qui est bonitas optima veritasque verissima. Ad cuius honorem factum est et propter ipsum addisci debet, ut principia fini correspondeant. In laude, cognitione et dilectione domini Dei, a quo omne bonum et verum procedit. Et ad quem est tamquam ad suum ultimum finem reducendum. Deo gratia.⁹³

⁹¹ Edition offered in Buonocore, *A Basic Handbook*, p. 314.

⁹² Edition offered in Buonocore, *A Basic Handbook*, p. 314.

⁹³ Edition offered in Buonocore, *A Basic Handbook*, p. 317.

II. The *Nove introductiones* in the History of pseudo-Lullian Logic: A Comparative Analysis

As we have already begun to see, the tradition of pseudo-Lullian logic is complex, as it includes at least three texts that circulated independently in the late Middle Ages and during the course of the Renaissance: the *Nove introductiones*, the *Logica brevis et nova*, and the *Logica parva*. Here I present the results that stem from my research on the text of the *Nove introductiones*, compared with that of the two other pseudo-Lullian logical texts. On a visual level, the outcome of such research is shown in Table I below, which gives an overview of how the three texts interact with each other. It consists in a comparison of the complete outline of the texts, taken from the chapter headings offered. It documents the correspondences between the organization of these three texts, by providing a way to see at first glance how the structural core of these logical works has remained the same in each case, despite the process of shortening and reworking of the treatment of some topics that also emerges from this scheme. In addition I chose seven key moments in the texts, significant both for their particular position in the layout of the text and for their philosophical import, and compared the way in which they deal with such moments, in order to demonstrate how the inter-textual correlations between the three texts are present even at the level of the very wording of the topics, and how one text seems to follow the other or even to constitute a summary of the other. From such a textual comparison, it appears that the *Logica parva* and the *Logica brevis et nova* could be two autonomous excerpts taken, separately and in different times, from the text of the *Nove introductiones*.

In my analysis, I have used the text of the *Nove introductiones* present in the Llull DB,⁹⁴ and compared it to both the text of the *Logica parva* found in Nicholas de Pax edition of 1512, as it is presented in the anastatic reprint edited by Charles Lohr in 1972,⁹⁵ and to that of the *Logica brevis et nova* derived from the 1651 Strasbourg edition by Lazarus Zetzner, as it appears in the anastatic reprint edited by Anthony Bonner in 1996.⁹⁶

I intend to compare the *Nove introductiones* to the most divulged, read, and in a sense standardized versions of the *Logica parva* and the *Logica brevis et*

⁹⁴ Edition offered in Buonocore, *A Basic Handbook*, pp. 225-317.

⁹⁵ See Charles Lohr's "Einführung" to Llull, *Logica nova. Logica parva* (cited *supra*, n. 5), pp. i-iii.

⁹⁶ See Bonner's "Introduction" to the anastatic reprint of the Zetzner edition, *Raimundus Lullus, Opera* (cited *supra*, n. 5), pp. 9*-27*.

nova.⁹⁷ Already in the titles, it is possible to trace a resemblance, or better, a line, connecting these three works. *Nove et compendiose introductiones logicae* is the title found in Clm. 10542, as Riccardiana 1001 does not present any separate title for the second text: this heading is typical of a Lullian tradition, as it stresses the main advantages that the Lullian logic had over the scholastic Aristotelian logic, brevity, conciseness and novelty, putting them together with a typical title for a didactic text, *introductiones*.

The *Logica parva*, also known in the edition of Nicholas de Pax as *Dialecticae introductiones*, seems to carry on this same tradition, and it simply exchanges the name of the subjects to be introduced, logic, for dialectics. On the other hand, the *Logica brevis et nova* betrays from its title a desire to return to the purity of Llull's teaching, as it goes back to the title of the *Logica nova* and stresses the points of brevity and novelty. Such desires are compatible with the needs of a school text, and it is probably because of its extreme brevity and relative simplicity that this text enjoyed a vast diffusion and circulation during the 15th c. and early 16th c., as it is attested by its six editions in between the *editio princeps* in 1475? (Venice: Gabriele di Pietro, 1480) and Lavinjeta's edition (Paris: Josse Bade 1516).⁹⁸

Bernard of Lavinjeta was a Franciscan friar and the holder of the first chair of Lullism at the Sorbonne in Paris in 1515. His main contribution to the history of philosophy consisted in the composition of the *Explanatio compendiosaque applicatio Artis Raimundi Lulli*, an encyclopedic work.⁹⁹ The *Explanatio*, which included numerous quotes and fragment of authentic Lullian texts, is important as it attests a connection between Lullism and encyclopedism, and represents an attempt to use the Lullian Art as a system of classification and exposition for all human knowledge. In the history of pseudo-Lullian logic Lavinjeta plays an important role since he not only published twice the *Logica brevis et nova* and included it in his own *Explanatio*, but also since it is through the filter of his editions that this text entered the famous Zetzner anthology of 1598.

The first and most evident conclusion, which emerges from a simple comparison of the scheme of each of the three logical texts object of my analysis (the *Nove introductiones*, the *Logica parva* and the *Logica brevis et nova*), is

⁹⁷ I omit the *Logica abbreviata*, since it is not an autonomous work, but rather one of the titles under which the *Logica brevis et nova* circulated in the late middle Ages and in the Renaissance. The Llull DB has only one entry for the *Logica brevis et nova*, and puts the title *Logica abbreviata* as an alternative title for the same text.

⁹⁸ See the entry for *Logica brevis et nova* in the Llull DB < <http://orbita.bib.ub.edu/ramon/bo.asp?bo=FD+II%2E6>>.

⁹⁹ Lavinjeta, *Explanatio compendiosaque applicatio Artis* (cited *supra*, n. 12), pp. 17-30.

that the *Nove introductiones* is by far the longest of the three texts. It contains almost double the number of sections as the *Logica parva* and exactly four times the number as the *Logica brevis et nova*. In the numbered outline offered in Table I, the *Nove introductiones* has one hundred subdivisions, while the *Logica parva* shows only fifty-five sections, and the *Logica brevis et nova* ends after a mere twenty-four chapters. This might point the scholar in the sense of recognizing a stronger difference between the works than it is actually present, and it would be an erroneous simplification of the problem.

At a closer look, the structure followed by the three texts is pretty much identical, although the *Nove introductiones* explains the issues in greater detail. The incipit of the three texts is basically *verbatim* the same: “Logica est ars [et scientia], cum qua verum et falsum ratiocinando cognoscuntur et unum ab altero discernuntur, verum eligendo et falsum dimittendo”. The text of the *Logica brevis et nova* omits the part on science, “et scientia”, but other than that the definition remains the same, and probably derived from a reworking of Llull’s statement in the *Introductoria artis demonstrativae*: “Unde licet aliquando Scientia et Ars in uno et eodem conjungantur, ut in Logica (Logica enim dicitur Scientia, et dicitur Ars) hoc tamen est per accidens”.¹⁰⁰

After the incipit, the *Nove introductiones* begins with six introductory sections, which form the ground for logical instruction and in which the author explains the principles and the rules (or questions) that underlie the teaching of each art, and therefore also of logic. These sections are extremely influenced by the authentic Lullian doctrines, and these six do not appear either in the *Logica parva* or in the *Logica brevis et nova*. It is plausible that both the *Logica parva* and the *Logica brevis et nova* did not need to present such a subdivision as they were composed for people who already knew the basics of the Lullian Art. This hypothesis is consistent with the results of my analysis, which point towards the conclusion that the *Logica parva* and the *Logica brevis et nova* are two autonomous versions of the *Nove introductiones*, more precisely two later reworkings of the text.

One of the main philosophical differences between the *Nove introductiones* and the other two texts is the number of the special principles for logic that they present. These *principia* constitute the organizing principles around which the *Nove introductiones* appears to take shape. In the *Nove introductiones* the *principia specialia logice* are five: the term, the proposition, the predicable terms, the *predicamenta*, or categories, and the argument. Instead, both the *Logica parva* and the *Logica brevis et nova* only list three principles for logic: the term,

¹⁰⁰ Ramon Llull, *Introductoria Artis demonstrativae*, *MOG* III, p. 2 (56).

the proposition and the argument. While this could appear to be a constitutive difference, at a closer analysis it is evident that is only a difference in terminology, as both the *Logica parva* and the *Logica brevis et nova* contain at least two sections devoted to the other two principles of the *Nove introductiones*, namely predicable terms and categories. Both texts simply do not list predicable terms and categories as principles for logic. This probably reflects a different understanding of what predicable terms and the *predicamenta*, or the ten categories, are: not a constitutive principle of logic, but a further subdivision of the section on *terminus*, the term.

In the *Nove introductiones* the following group of sections addresses the first special principle of logic, the term. An explanation of the term is present in all three texts, although the *Logica parva* seems to make an effort to look more similar to the authentic Lullian *Logica nova* and, at least in the titles, reintroduces the Lullian metaphor of the tree, or the *arbor logicalis*, of which the term would in turn constitute the roots. The *Nove introductiones* analyzes the term in five subsections, which mirror a Lullian combinatory device, while the other two texts limit the treatment of term to only one section. The definition of term is identical in all three texts: “Terminus est dictio significativa, ex qua propositio constituitur”, though the discussion in the *Logica brevis et nova* is very brief and the few examples cited are the Lullian *dignitates*, intending here the absolute principles insofar as they are God’s attributes.¹⁰¹ The *Nove introductiones* offers the most complete account of the topic, and the *Logica parva* seems to follow it very closely. Both texts divide the term in categorematic and syncategorematic, communal, univocal, equivocal, denominative, singular, abstract and concrete, while the *Logica brevis et nova* only reports the difference between communal and discrete: the text becomes progressively shorter and simpler with each version.

The next sections of the *Nove introductiones* deal with the theory of propositions, which occupies sections from twelve to twenty-five. For this section it should be noted that the *Logica brevis et nova* follows exactly the structure of the *Nove introductiones*, and therefore it presents the three sections on proposition right after the discussion on the terms. On the other hand though, the *Logica parva* postpones the treatment of the proposition, which consists in a total of seven sections, from fourteen to twenty, placing it after a section on intentions and impositions, which, in turn, is absent from both the other texts, and after the section on *predicabilia* and *predicamenta*, predicable terms and categories, which will come up only later in the scheme of the *Nove introductiones* and of

¹⁰¹ See Bonner, *The art and logic of Ramon Llull* (cited *supra*, n. 27), pp. 125-134.

the *Logica parva*. The sections on propositions also constitute the second part of the logical tree, namely the trunk of the tree.

The definition of proposition is again very similar in all three texts, and in particular the text of the *Logica parva* reproduces *verbatim* that of the *Nove introductiones*, which contains again the longest and most detailed exposition. The structure of this section is identical for all the texts: the proposition is subdivided into true, false, categorical and hypothetical. The categorical proposition is in turn divided into particular, universal, indefinite and singular, affirmative and negative: not only the structure but the language used is very similar, and most definitions are matching.

The inter-textual similarities are numerous enough and striking enough to justify the hypothesis of a dependence of the *Logica parva* and the *Logica brevis et nova* on the text of the *Nove introductiones* or at least to presuppose a common origin of the three texts. Given the fact that the composition of the *Nove introductiones* can be traced so early in the Lullian tradition, though, it seems highly probable that the *Nove introductiones* was the text that functioned as a guide, as the ur-text, for all those who wanted to write a handbook of Lullian logic.¹⁰² The inter-textual nexus between the tree works is evident throughout the whole length of the exposition, even if the three texts are still clearly differentiated: in their length, in some examples, and in some divergent choices in the organization of the material.

In the *Nove introductiones*, the clarification of the problems posed by the hypothetical proposition follows the part on the general (or categorical) proposition, and it forms a block of eight sections, from twenty-six to thirty-three: the same scheme applies to the *Logica brevis et nova*, in which the whole explanation occupies only one section. The *Logica parva*, instead, treats the hypothetical proposition after the explanation of proposition in general, therefore after the exposition of *predicabilia* and *predicamenta*. Despite this difference in the placement of the discussion, the definition of hypothetical proposition is identical in all three texts, and its subdivisions are the same: *copulativa*, *disiunctiva*, *conditionalis*, *rationalis*, *temporalis* and *localis*. Even the wording of the definition is almost identical: once again the inter-textual links between these three texts are evident.

¹⁰² It is possible that Thomas Le Myésier's *Summula sive Introductio in logicalibus*, which opened the *Electorium magnum*, also played a role in the tradition of handbook for logic coming out of the Lullian school. To prove or disprove this point, though, would require access to an edition of this text, unavailable at the present time. The best study of the *Electorium* is still that of J. N. Hillgarth, *Ramon Lull and Lullism in Fourteenth-Century France* (Oxford: Clarendon Press, 1971).

One of the main differences in the structure and in the material of the texts is that in the *Nove introductiones*, the section on predicable terms and on the categories comes just after the section on proposition, and it is formed by seventeen distinctions, from thirty-four to fifty. On the contrary, the *Logica brevis et nova* only dedicates one section to *predicabilia* and *predicamenta*, and it places it after three sections on suppositions, amplifications and restrictions: such sections are omitted in the *Nove introductiones*, but are present in the *Logica parva*, which also places them right after the discussion on hypothetical propositions. The definition of the various *predicamenta*, or categories, is also very similar in all three texts, but the text of the *Logica parva* is sensibly shorter than the *Nove introductiones*, while the *Logica brevis et nova* basically reduces the treatment of each category to a mere line.

The sections on *ampliatio*, *restrictio* and on the theory of supposition in general are the only important logical topics that are explained in the later two texts and do not appear in the *Nove introductiones*. In addition, in the *Logica parva*'s tree analogy these sections form the third part of the tree of logic, or the branches of the logical tree.

Such a fact strengthens the hypothesis that the *Logica parva* and the *Logica brevis et nova* are basically two re-writings, two different versions, two autonomous excerpts from the *Nove introductiones*. In fact, the need to add a section on the theory of supposition points towards a different logical sensibility than that of a simple schoolmaster who was trying to teach logic in a monastic environment. It would then be perfectly acceptable to pose Peter of Spain's *Summule logicales* as the source behind this section, since the theory of supposition is explained in *tractatus VI* of the *Summule*, which appears to have been ignored by the author of the *Nove introductiones* in his effort to combine Lull with Peter of Spain.¹⁰³

A long discussion on the theory of demonstration constitutes the next block of sections in the *Nove introductiones*, from fifty-one to eighty-one, and it is very influenced by Lullian theories. In the *Logica parva*, this division is called *De syllogismo*, which composes the fourth part of the logical tree, the flowers of the tree, and it occupies eleven sections, from thirty to forty, while in the *Logica brevis et nova* it comes after the section on predicable terms and categories. It is interesting to note how this is the longest group of sections present in the *Logica brevis et nova*: it consists of twelve sections, from ten to twenty-one, and it represents the one topic in which the *Logica brevis et nova* seems to follow more

¹⁰³ Peter of Spain, *Tractatus*, VI *De suppositionibus*, pp. 79- 88; Peter of Spain, *Trattato di Logica*, pp. 186-207.

closely the exposition offered by the other two texts, though condensing and shortening it. Such consistency is probably due to the importance of the material, the theory of demonstration, which forms the core of a handbook for logic, as it teaches the reader how to create efficacious demonstrations, and therefore how to win an intellectual dispute.

The *demonstratio per aequiparantiam* is probably the most authentic Lullian feature explained in all three texts: the definition of this demonstration is identical in all three texts and in the *Logica brevis et nova* it basically represents the whole exposition of the topic. Conversely the *Logica parva* mirrors closely the treatment of the *demonstratio per aequiparantiam* given in the *Nove introductiones*: both texts describe the three *modi* of the demonstration, both explain why this is the stronger kind of demonstration possible, and strangely enough, in this section the *Logica parva* offers more examples than the *Nove introductiones*.

After discussing the various kinds of argumentation, the following section in all three texts deals with the fallacies, or erroneous reasoning, and it explains why they are wrong and how to avoid falling into a fallacious argument. The *Nove introductiones* presents a long and detailed section on the fallacies, which consists of the fifteen subdivisions (from eighty-two to ninety-six), listing the traditional thirteen fallacies, the six fallacies *in dictione* and the seven *extra dictione*. In the *Logica parva*, the section on the fallacies is also comparatively long and detailed, since it is made up of the same fifteen subdivisions, from forty-one to fifty-five, as the *Nove introductiones*. This section is the last one before the explicit and it forms the fifth part of the logical tree, or the foliage of the tree: the explicit then clarifies that the fruit of the logical tree cannot be explicitly expressed in this book, as the result of logic is the ability to learn all the higher sciences.¹⁰⁴ Conversely, the *Logica brevis et nova* offers a very brief exposition of the fallacies, which condenses all of the fallacies into a single section “*De fallaciis*” and which basically limits the treatment of each fallacy to the mere enunciation of where the error in reasoning comes from.

The *fallacia accidentis* can be seen as an example of the textual correlations between the three books: once again the definition of this fallacy is almost identical in all the three texts (and the *Logica parva* reproduces *verbatim* the text of the *Nove introductiones*).¹⁰⁵ The main difference is that the *Logica brevis et*

¹⁰⁴ For a possible source of the treatment of fallacies here see Fidora and Wyllie, “Ramon Llull i el tractat *De fallaciis*”, pp. 11-19.

¹⁰⁵ Fidora and Wyllie, “Ramon Llull i el tractat *De fallaciis*”, pp. 15-18, argue very convincingly that the *fallacia accidentis* is in reality an error of the copyist or of Llull himself in the *Logica nova* for *fallacia antecedentis*. Clearly the *Nove introductiones* and the *Logica parva* take the error directly from the Lullian source.

nova does not explain the three modes of the fallacy, and simply ends the exposition of this topic with a brief example.

After the section on the fallacies, the *Logica brevis et nova* ends with two short subdivisions on the way in which a dispute should be handled, and on the conditions for a good dispute: this is the same topic that the *Nove introductiones* addresses in subdivision ninety-seven, *De modo disputandi*, which encompasses both sections of the *Logica brevis et nova*. The *Nove introductiones* includes two more subdivisions, unique to this text, in which the author gives some additional didactical advice on how to better learn the logical art, and a third, *De fine* (the last, and number one hundred), which contains the actual explicit of the book.

It is noticeable that the *Logica brevis et nova* does not present any explicit, but ends with the last words of the section on the conditions of disputation. In a very interesting move, the Lullian scholar Bernhard of Lavinjeta in his 1516 and 1518 editions placed after the last section of *Logica brevis et nova* the short treatise *De venatione medii inter subiecti et predicati*, which was supposedly an anonymous text, but which is in reality an excerpt from an authentic Lullian work, as it constitutes *distinctio VII* of the *Liber de venatione substantiae accidentis et compositi*.¹⁰⁶ Such an intellectual operation assumes more meaning if we consider that, as I hope to have shown in the analysis of the *Nove introductiones*, the *Liber de venatione substantiae* can be recognized as one of the original Lullian texts that inspired the anonymous author of the *Nove introductiones*. In addition the Zetzner edition followed in this respect the text provided by Lavinjeta, adding the *De venatione medii* directly after the *Logica brevis et nova*.

To sum up, I hope to have shown how the texts of the *Nove introductiones*, of the *Logica parva* and of the *Logica brevis et nova*, are related to each other. Though it is evident that they are three autonomous works, and that had a very different history and circulation, it is equally clear that they form a sort of textual unity. The *Nove introductiones* is the earliest, longest and most detailed version of this short handbook of Lullian logic, and it constitutes a manifest textual reference, almost a model, as it offers a trace, a scheme around which the other two texts are organized. Moreover, it provides the very language used and many

¹⁰⁶ For a more complete treatment of the *Liber de venatione substantiae accidentis et compositi*, I redirect the reader: Eleonora Buonocore, *Ars et logica et metaphysica. Lo sviluppo della logica Lulliana da ars inventiva a venatio medii* (Tesi di laurea, Università degli Studi di Siena, 2001), chapter 4, which in turn draws on Vennebush "De venatione medii inter subiectum et praedicatum: ein Abschnitt aus 'De venatione substantiae accidentis et compositi' des Raimundus Lullus", *Bulletin de Philosophie Medievale* 14 (1972), and on A. Madre "Introduction" to ROL XXII (1998), pp. 4-6.

direct quotes, as some long sections, especially of the *Logica parva*, can be recognized as *verbatim* reproductions of the text of the *Nove introductiones*.

In conclusion, it appears that the *Logica parva* and the *Logica brevis et nova* are two autonomous versions, almost two different redactions excerpted from the same original: the *Nove introductiones*.

The *Logica parva* is preserved in one older manuscript, ms. Salamanca, BU, 2465, whose broad dating (14th-15th century) allows the scholar to wonder about its composition, and its possible ties to the logical tradition of the Lullian schools during the second half of the 14th century. The text was published for the first time by Nicholas de Pax and Alfonso de Proaza in 1512: in the prefatory letter to the edition, Nicholas de Pax attributes its paternity to Ramon Llull himself, and in an epigram added at the end of ms. Palma, BP, 1044, his disciple Vicentius Valerius claims that the text had been found in a manuscript lost in a dusty library. While it is certain now that the text is not authentically Lullian, I believe that Nicholas de Pax and Alfonso de Proaza were telling the truth about that lost manuscript. The text they found buried in that old library was that of the *Nove introductiones*, or better a later and more Lullian inspired redaction of it, that of the Salamanca manuscript, which they in turn proceeded to edit and to present to the public.

The history behind the *Logica brevis et nova* is probably similar: I believe that this even shorter and more schematic version of the *Nove introductiones* was elaborated by an anonymous teacher of logic, possibly connected to the peregrinations of Lullian scholars from Catalonia to Italy (as the *editio princeps* of this text was printed in Venice). The whole text bears the mark of a serious scholastic master and of a serious Lullian scholar. This anonymous teacher cut all the parts in which the text of the *Nove introductiones* was redundant and not accurate, and added the parts from Peter of Spain on supposition. Later, Lavin-heta republished it in 1516 including at the end the wholly authentic Lullian *Liber de venatione medii inter subiecti et predicati*.¹⁰⁷

The presence of several later manuscripts that contain the text of the *Logica brevis et nova* contributes to support the hypothesis of a wide diffusion of this text during the second half of the 15th century: the ms. Munich, Clm. 4381 is dated 1497, while the mss. Copenhagen, KB, Ny kgl. Samling 640 8° and Vatican, BA, Vat. lat. 3069, can be dated to a generic 15th century.¹⁰⁸ What is beyond

¹⁰⁷ See Ramon Llull, *De venatione substantiae, accidentins et compositi*, ROL XXII, *Distinctio* VII, 1-2, pp. 83-87.

¹⁰⁸ For a description of the manuscripts that contain the *Logica brevis et nova* see the Llull DB entry for this text <<http://orbita.bib.ub.edu/ramon/bo.asp?bo=FD+II%2E6>>.

doubt is that the redaction of the *Logica brevis et nova* is the work of a very well learned scholar both of logic and of Lullism destined to remain anonymous unless further evidence is discovered. This master of logic shows a clear desire to harmonize the Lullian doctrines with those of Peter of Spain, and thus integrated a shortened kernel of Lullian logic (taken as it has been shown from various authentic sources, but mostly the *Logica nova*) with the more normal scholastic doctrines on propositions (such as the squares of opposite propositions). Moreover, it is certain that Lavinheta himself found this text interesting enough to publish it twice, in 1516 and in 1518, and to include it in his masterpiece, the *Explanatio* in 1523.

It is through Lavinheta's redaction that the *Logica brevis et nova* was then included in the widespread Lazarus Zetzner's editions, disguised as an authentic work of Llull, and therefore formed the logical basis for later Renaissance Lullism. It is in this form that it reached fame and was able to influence generations of students of logic, among which the most influential will be Leibniz. And in an interesting twist of fate, it is in this form that the work of our unknown Lullian master of logic, the *Logica brevis et nova*, will become the basis for Prantl's famous excoriation of Llull's logic, which paved the way for the academic dismissal of Llull's doctrines which lasted until the second half of the 20th century.¹⁰⁹

Table 1. The Structure of the Three pseudo-Lullian Handbooks for Logic:
A Comparison.

Nove introductiones (Clm. 10542)	Logica parva (ed. Pax- Lohr) Dialecticae introductiones	Logica brevis et nova (ed. Zetzner)
Incipit: Logica est ars et scientia cum quo verum et falsum ratiocinando cognoscuntur et unum ab altero discernuntur verum eligendo et falsum dimittendo. Sed quoniam logica est philosophie membrum ob hoc est particularis scientia particularia habens principia que subiciuntur alicui utilitati secundum quod ratio et natura hoc insinuant.	Incipit: Logica est ars et scientia, cum qua verum et falsum ratiocinando cognoscuntur et unum ab altero discernitur, verum eligendo et falsum dimittendo. Cuius principia specifica sunt tria : scilicet terminus, propositio et argumentatio.	Incipit: Deus cum tua summa perfectione incipit Logica brevis et nova, Logica est ars, qua verum et falsum ratiocinando cognoscuntur et argumentative discernuntur. In logica considerantur tria inter alia : scilicet terminus, propositio et argumentum.

¹⁰⁹ Carl Prantl, *Geschichte der Logik im Abendlande*, III Band (Leipzig: Von S. Hirzel, 1867), pp. 145-177; in particular the final judgment found in p. 177: "Dass die ganze 'Kunst' des Lullus schlechtin werthlos ist, bedarf nun wohl keines besonderen Nachweises mehr".

... Principia specialia logice sunt quinque , scilicet terminus, propositio, probabilia, predicamenta, argumentatio; subiectum est ratiocinatio...		
X – 1 De decem trascendentibus	A – 1 De radicibus arboris De termino	A – 1 De terminis
X – 2 De novem istrumentalibus principiis que sunt secundum universale	X – 2 De intentionibus et impositionibus	B – 2 De propositione
X – 3 De decem regule sive questiones	D – 3 De praedicabilibus	B – 3 De oppositionibus
X – 4 De duplici modo tractandi regulas	D – 4 De praedicamentis	B – 4 De materia propositionis
X – 5 De introducentis doctrina	D – 5 Praedicamentum substantiae	C – 5 De propositione hypothetica
X – 6 De pricipiis specialibus logice	D – 6 De quantitate	I – 6 De suppositionibus
A – 7 Terminus quid	D – 7 De qualitate	I – 7 De ampliacionibus
A – 8 Terminus differentia	D – 8 De relatione	I – 8 De restrictione
A – 9 Terminus concordantia	D – 9 De actione et passione	D – 9 De predicabilibus et predicamenta
A – 10 Terminus equalitas A – 11 Terminus minoritas	D – 10 De situ	E – 10 De argumento
B – 12 De secundo principio. Propositio quid B- 13 Propositio differentia	D – 11 De habitu	E – 11 De syllogismo
B – 14 De multiplicatione ex terminorum in propositione categorica	D – 12 De tempore	E – 12 De prima figura
B – 15 Categorica differentia	D – 13 De loco	E – 13 De secunda figura
B – 16 Propositio concordantia	B – 14 Pars Secunda De trunco arboris scientiae logicalis De propositione	E – 14 De tertia figura
B – 17 Propositio contrarietas	B – 15 Pars De quantitate propositionis categoricae	E – 15 De inductione
B – 18 De contradictione	B – 16 Pars De qualitate propositionum	E – 16 De enthymemate
B – 19 De octo propositionibus in quibus apparet esse contradictio	B – 17 Pars De petitionibus	E – 17 De exemplo
B – 20 Propositio principium	B – 18 Pars De conversionibus	E – 18 De locis et primo de loco a maiori
B – 21 Propositio medium	B – 19 Pars De oppositionibus	E – 19 De loco ad aequali
B – 22 Propositio finis	B – 20 Pars De aequipollentiis	E – 20 De loco a minori
B – 23 Propositio maioritas	C – 21 De propositione hypothetica	E – 21 De consequentiis
B – 24 Propositio equalitas	C – 22 De aequivalentibus hypotheticis	F – 22 De fallaciis
B – 25 Propositio minoritas	C – 23 De terminis modificativis	G – 23 De disputatione

C– 26 Propositio ypothetica quid	C – 24 De modalibus	G – 24 De conditionibus disputationis
C– 27 Ypothetica differentia	C – 25 De triplici propositionum differentia	
C– 28 De possibili et impossibili, contingenti et necessario	I – 26 Pars tertia de branchis arboris scientie logicalis De suppositione	Explicit: ut infrenetur particularis contrarietas, quam habent circa hoc, de quo disputant.
C– 29 De propositionibus formari possibilibus? Ex antedictis terminis	I – 27 De regulis suppositionum	Continues with the De venatione medii
C– 30 Differentia in situ istorum terminorum	I – 28 De ampliationibus	
C– 31 De compositione et divisione harum propositionum	I – 29 De appellationibus	
C– 32 De harum veritate et falsitate propositionum	E – 30 Pars Quarta De floribus arboris logicalis De syllogism	
C– 33 De triplici propositionum differentia	E – 31 De inductione	
D – 34 De predicabilibus que sunt tertium logice principium. Predicabile quid	E – 32 De enthymemate	
D – 35 Genus differentia	E – 33 De exemplo	
D – 36 Species quid	E – 34 De antecedente et consequente	
D – 37 Differentia quid	E – 35 De locis	
D – 38 Proprietas quid	E – 36 De regulis locorum	
D – 39 Accidens quid	E – 37 De demonstrationibus	
D – 40 De predicamentis que sunt quartum in logicam principium	E – 38 De demonstratione per quid	
D – 41 Substantia quid	E – 39 De demonstratione per quia	
D – 42 Quantitas quid	E – 40 De demonstratione per aequiparantiam	
D – 43 Qualitas quid	F – 41 Pars quinta De foliis arboris logicalis De parallogismo	
D – 44 Relatio quid	F – 42 De fallatia aequivocationis	
D – 45 Actio quid	F – 43 De fallatia amphibologiae	
D – 46 Passio quid	F – 44 De fallatia compositionis	
D – 47 Habitus quid	F – 45 De fallatia divisionis	
D – 48 Situs quid	F – 46 De fallatia accentus	
D – 49 Tempus quid	F – 47 De fallatia figure dictionis	
D – 50 Locus quid	F – 48 De fallatia extra dictionem	
E – 51 Sequitur quintum et ultimum logice principium quod est argumentatio	F – 49 De fallatia accidentis	

E – 52 De probatione	F – 50 De fallatia a secundum quid ad simpliciter	
E – 53 De demonstratione quid	F – 51 De fallatia ignorantie elenchi	
E – 54 De demonstratione quia	F – 52 De fallatia petitionis principii	
E – 55 De demonstratione per equiparantiam	F – 53 De fallatia consequentis	
E – 56 De sillogismo et principii ad eum requisitis	F – 54 De fallatia secundum non causam ut causam	
E – 57 De investigatione medii et ipsius inventione ... differentia	F – 55 De fallatia secundum plures interrogationes ut unam	
E – 58 Medium concordantia		
E – 59 Medium contrarietate	Explicit: Haec arbor logicalis non habet in se ipsa fructuum, quia fructus logicae colligitur in scientiis altioribus ad quas logica ordinatur tamquam instrumentum ad opus	
E – 60 Medium principium		
E – 61 Medium finis		
E – 62 Medium maioritas		
E – 63 Medium equalitas		
E – 64 Medium minoritas		
E – 65 Sillogismus quid		
E – 66 Sillogismus quo modo sit		
E – 67 De multiplicatione extremitatum et mediorum		
E – 68 De novem generalibus subiectis		
E – 69 De tribus figuris sillogismorum		
E – 70 De conditionibus generalibus		
E – 71 De prima figura		
E – 72 De secunda figura		
E – 73 De tertia figura		
E – 74 De inductione qua est secunda species argumentationis		
E – 75 De tertia specie argumentationis scilicet entimemate		
E – 76 De exemplo que est quarta species argumentationis		
E – 77 De lociis		
E – 78 De loco a maiori		
E – 79 De loco ab equale		
E – 80 De loco a minori		
E – 81 De antecedente et consequente		
F – 82 De parallogismis		

F – 83 De fallaciis equivocacionis		
F – 84 De fallacia amphibolie		
F – 85 De fallacia compositionis		
F – 86 De fallacia divisionis		
F – 87 De fallacia accentus		
F – 88 De fallacia figure dictionis		
F – 89 De fallacia extra dictionem		
F – 90 De fallacia accidentis		
F – 91 De fallacia secundum quid et simpliciter		
F – 92 De fallacia ignorantie elenchi		
F – 93 De fallacia petitionis principii		
F – 94 De fallacia consequentis		
F – 95 De fallacia secundum non causam ut causam		
F – 96 De fallacia secundum plures interrogationes ut una		
G – 97 De modo disputandi		
H – 98 Sequitur questiones decem per quorum solutiones magna de logica habetur notitia		
H – 99 De hiis que ad huius operis notitiam preexhiguntur		
H – 100 De fine		

Legend:

X = Beginning section of the *Nove introductiones* [and a section *De intentionibus* in the *Logica parva*]

A = On Terms

B = On Propositions

C = On Predicables and Predicamenta (Categories)

D = On the Hypothetic Proposition

E = On Argumentation

F = On Fallacies

G = On the Conditions for a Dispute

H = On the Ten Questions

I = On Supposition, Ampliation and Restriction

No letter = Incipits and explicits

Key Words

Nove introductiones, *Logica brevis et nova*, *Logica parva*, history of lullian logic, theory of demonstration, interaction between lullian and scholastic logic.

Paraules clau

Nove introductiones, *Logica brevis et nova*, *Logica parva*, història de la lògica lul·liana, teoria de la demostració, interacció entre la lògica lul·liana i l'escolàstica.

Abstract

This paper presents the text and textual history of the *Nove introductiones* as a part of the larger history of pseudo-Lullian logic in the late 14th and early 15th c, in particular in an Italian context. The author first provides a detailed description and analysis of the text of the *Nove introductiones*, pointing out how the Lullian elements interact with the elements derived from the scholastic tradition of logic (such as Peter of Spain's *Summule logicales*). Subsequently, the paper offers a parallel analysis of the three major texts in the history of *pseudo-Lullian logic*, the *Nove introductiones*, the *Logica parva* and the *Logica brevis et nova*, showing how these text have a common structure and present striking similarities. In particular the *Nove introductiones* is the longest and most detailed text, and the *Logica parva* and the *Logica brevis et nova* are two later, shorter versions of this handbook of logic, either extracted from it or from a common ancestor, a lost Ur- text of late Medieval Lullian logic.

Resum

Aquest article presenta el text i la història textual de les *Nove introductiones* com una part de la història de la lògica pseudolul·liana de finals del segle XIV i principis del XV, especialment en context italià. L'autora ofereix primerament una descripció detallada i una anàlisi del text de les *Nove introductiones*, subratllant de quina manera els elements lul·lians interaccionen amb derivats de la tradició lògica escolàstica (com ara les *Summule logicales* de Pere d'Espanya). Seguidament el treball presenta una anàlisi en paral·lel dels tres textos més rellevants de la història de la lògica pseudolul·liana, les *Nove introductiones*, la *Logica parva* i la *Logica brevis et nova*, fent veure que aquest textos tenen una estructura comuna i semblances molt destacades. Concretament les *Nove introductiones* són el text més llarg i detallat, i la *Logica parva* i la *Logica brevis et nova* són dues versions posteriors d'aquest manual de lògica, tal vegada procedents d'aquest primer text o d'un antecedent comú, una hipotètica primera versió perduda de la lògica lul·liana medieval tardana.